Holden

APOLLO

OWNER'S HANDBOOK

JM SERIES

Vehicle Identification Certificate

Owner's Name ....
Address ....
Town..
State ....Postcode ....
Model Name ....
Reg. No. ....Eng. No. ....
Odometer Reading ....
Date of Purchase ....
Vehicle Identification Number ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Selling
Dealer's
Stamp & Signature ....

Change of address/ownership

It may be necessary for General Motors-Holden's Automotive Limited (hereinafter Holden's) to contact the owners of Holden vehicles from time to time. To enable this contact, records are maintained of owner's names and addresses.

So we can keep these records up to date, please complete and return by mail one of the forms at the rear of this handbook, if

a) you change your address

b) you have purchased this car from a previous owner.

Part No. 01999-9B102
April 1993

Foreword

Welcome to the growing group of value-conscious people who drive Holdens. We are proud of the advanced engineering and quality construction of each vehicle we build.

Please read this Owner's Manual carefully. It contains information vital to your safety and for the effective and efficient operation of your Holden vehicle. It will acquaint you with the features of your new Holden and help you enjoy many kilometres of motoring pleasure in safety.

When it comes to service, remember that your Holden dealer knows your vehicle best and is interested in your complete satisfaction. He will provide you with quality maintenance. You should ask him about any assistance you may require.

Please leave this Owner's Manual in this vehicle at the time of resale. The next owner will also need this information.

All information and specifications in this manual are current at the time of printing. However, because of Holden's policy of continual product improvement, we reserve the right to make changes at any time without notice.

Please note that this manual applies to all models and explains all equipment, including options. Therefore, you may find some explanations for equipment not installed on your vehicle.

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Modification of your Holden

Please be aware that any modification of your Holden could affect its performance, safety, durability or warranty, and may even violate governmental regulations.

Installation of a mobile two-way radio system

As the installation of a mobile two-way radio system in your vehicle could affect electronic systems such as electronic fuel injection system, be sure to check with your Holden dealer for precautionary measures or special instructions regarding installation.

SECTION A–Vehicle Operation and Care A

SECTION B–Warranty and Maintenance B

SECTION C–Index C

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SECTION A - Vehicle Operation and Care Table of Contents

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Safety and vehicle damage warnings

In this manual, you will see CAUTION and NOTICE warnings. These are used in the following ways:

CAUTION:

This is a warning against something which may cause injury to people if the warning is ignored. You are informed what you must, or must not do, in order to avoid or reduce the risk to yourself and other people.

NOTICE:

This is a warning against something which may cause damage to the vehicle or its equipment. You are informed what you must, or must not do, in order to avoid or reduce the risk of damage to your vehicle and its equipment.

Part 1

OPERATION OF INSTRUMENTS AND CONTROLS —

Chapter 1-1

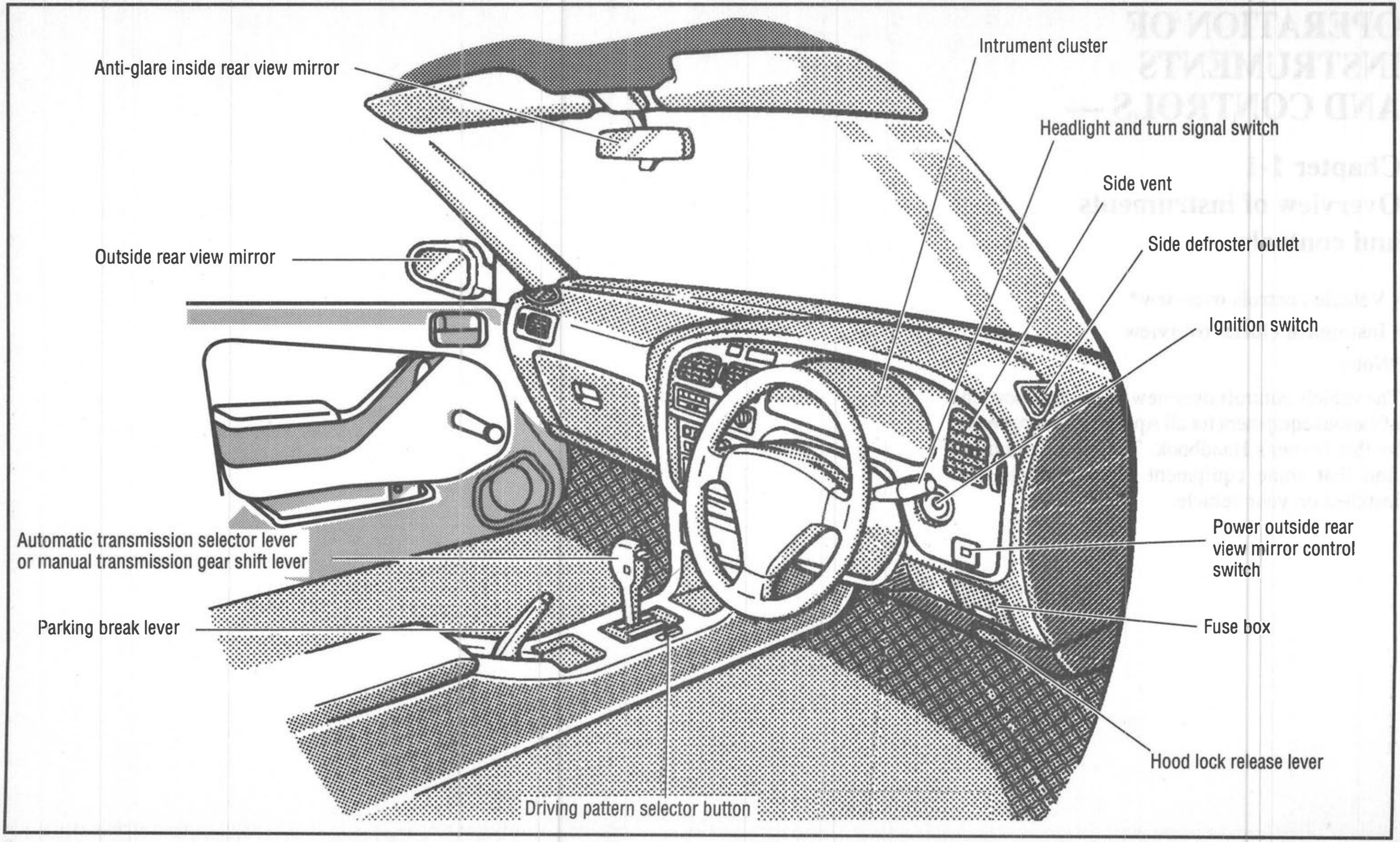
Overview of instruments and controls

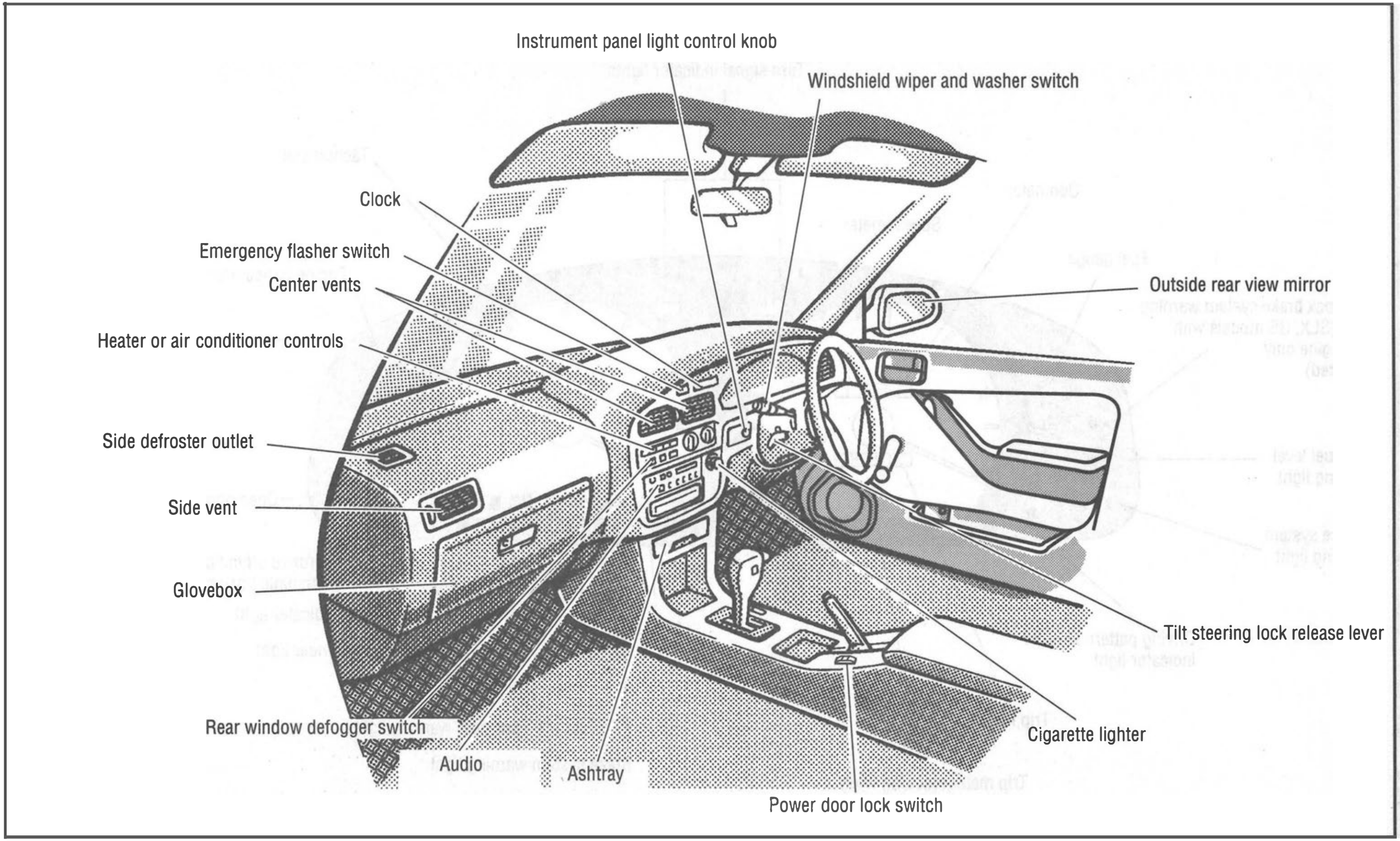
- Vehicle controls overview*
- Instrument cluster overview

*Note:

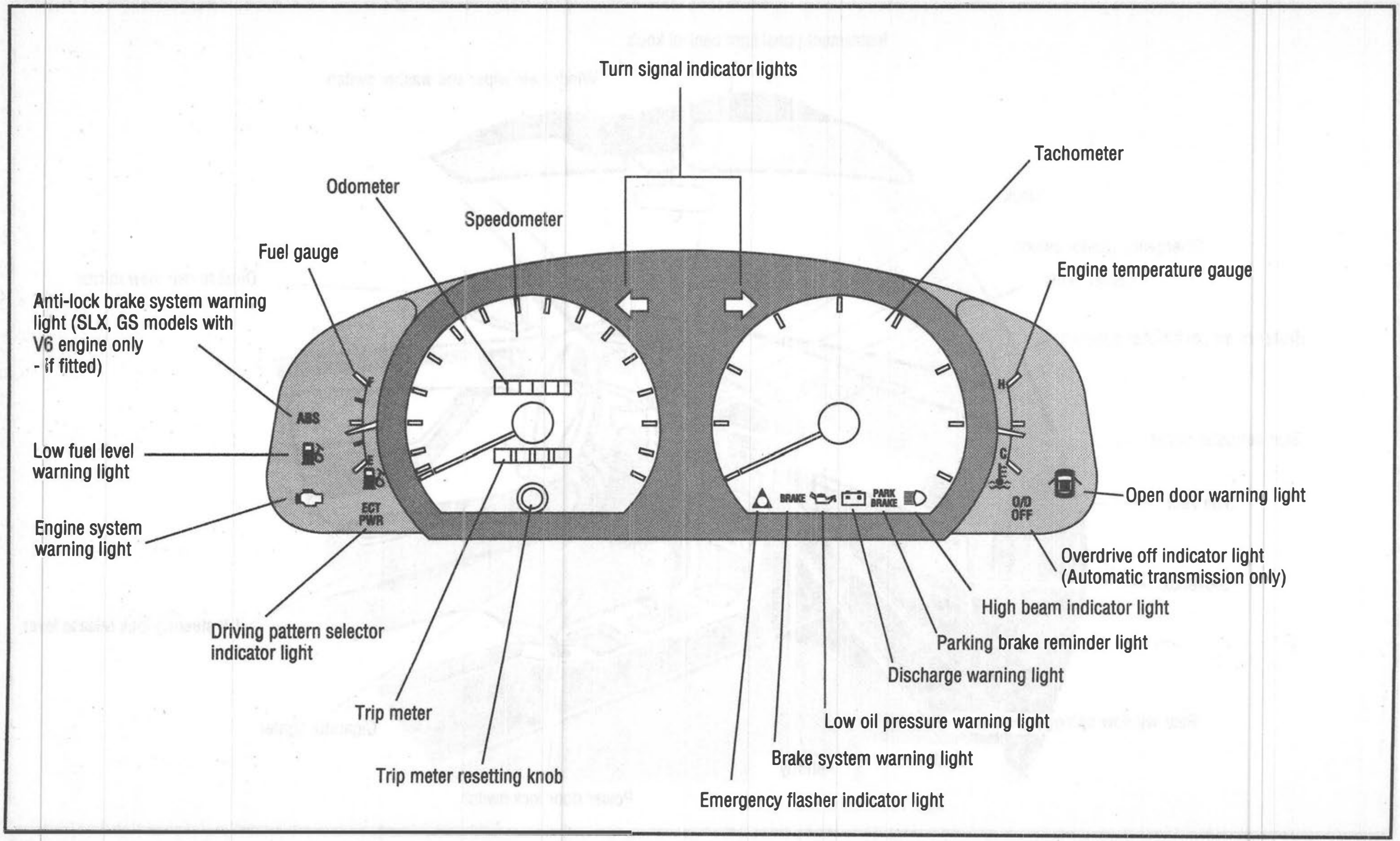
The vehicle controls overview shows the location of various equipment for all Apollo models covered by this Owner's Handbook. Therefore, you may find that some equipment represented is not installed on your vehicle.

Vehicle controls overview

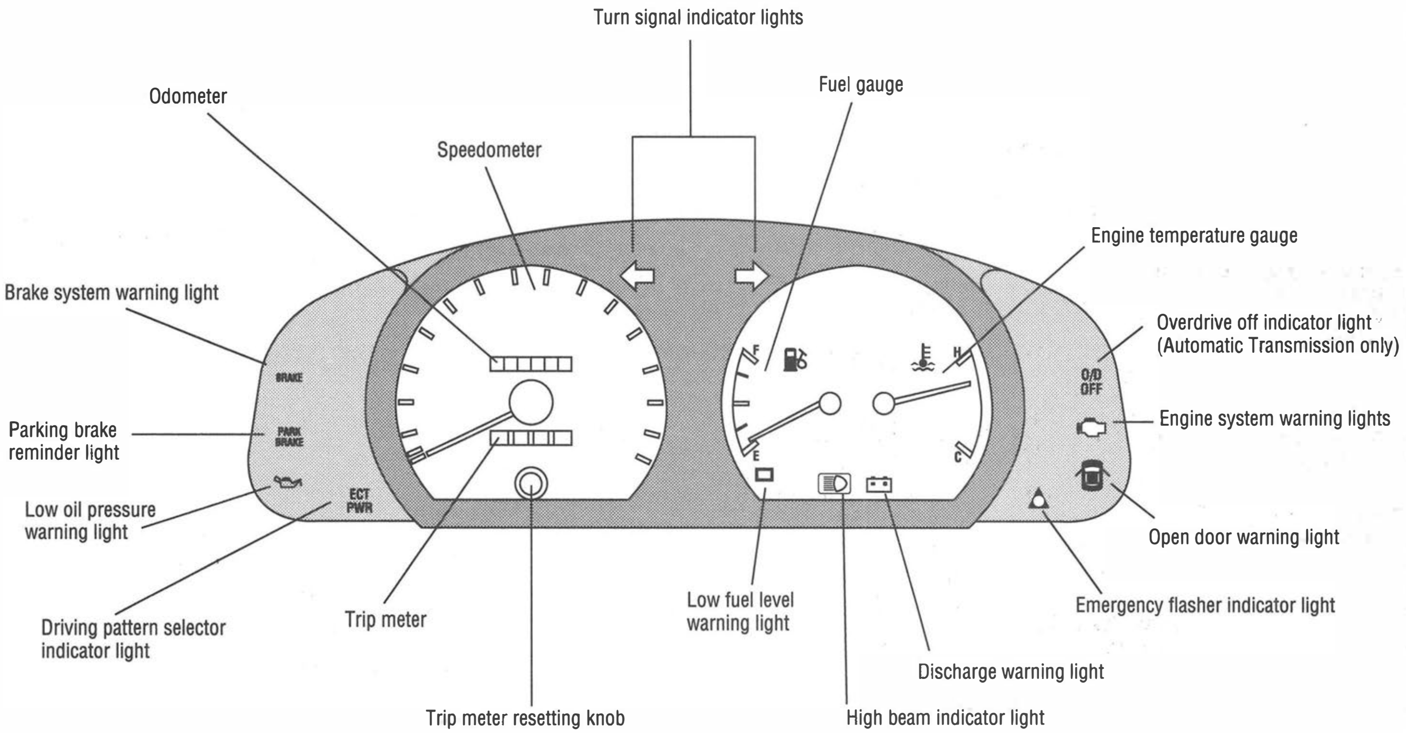

Anti-glare inside rear view mirror
Intrument cluster
Headlight and turn signal switch
Side vent
Side defroster outlet
Outside rear view mirror
Ignition switch
Automatic transmission selector lever or manual transmission gear shift lever
Power outside rear view mirror control switch
Parking break lever
Fuse box
Hood lock release lever
Driving pattern selector button


Instrument panel light control knob
Windshield wiper and washer switch
Clock
Emergency flasher switch
Center vents
Outside rear view mirror
Heater or air conditioner controls
Side defroster outlet
Side vent
Glovebox
Tilt steering lock release lever
Rear window defogger switch
Cigarette lighter
Audio
Ashtray
Power door lock switch

Instrument cluster overview — SLX models with V6 engine, GS models


Turn signal indicator lights
Tachometer
Odometer
Speedometer
Fuel gauge
Engine temperature gauge
Anti-lock brake system warning light (SLX, GS models with V6 engine only - if fitted)
ABS
F
E
H
C
Low fuel level warning light
Engine system warning light
ECT PWR
BRAKE
PARK BRAKE
O/D OFF
Open door warning light
Overdrive off indicator light (Automatic transmission only)
High beam indicator light
Parking brake reminder light
Discharge warning light
Driving pattern selector indicator light
Trip meter
Low oil pressure warning light
Brake system warning light
Trip meter resetting knob
Emergency flasher indicator light

Instrument cluster overview — SLX models with four cylinder engine

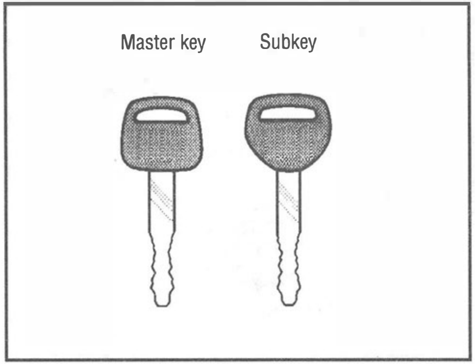

Turn signal indicator lights
Fuel gauge
Odometer
Speedometer
Engine temperature gauge
Brake system warning light
Overdrive off indicator light (Automatic Transmission only)
BRAKE
O/D OFF
Engine system warning lights
Parking brake reminder light
PARK BRAKE
F
H
E
C
ECT PWR
Low oil pressure warning light
Open door warning light
Emergency flasher indicator light
Driving pattern selector indicator light
Trip meter
Low fuel level warning light
Discharge warning light
Trip meter resetting knob
High beam indicator light

Part 1
OPERATION OF INSTRUMENTS AND CONTROLS —

Chapter 1-2
Keys, Doors and Fuel tank cap

- Keys
- Door locks
- Trunk lid
- Tailgate
- Hood
- Fuel tank cap

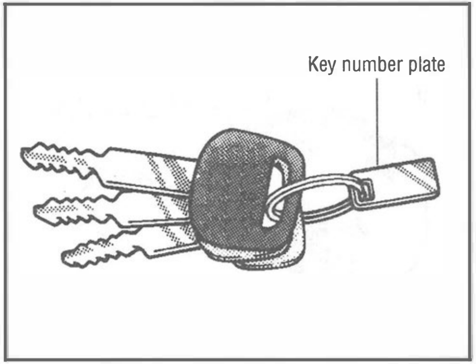
Keys



The master key works in every lock. The subkey will not work in the trunk and glove box.

To protect things locked in the trunk or glovebox when you have your vehicle parked, leave the subkey with the attendant.

Since the doors and trunk lid can be locked without a key, you should always carry a spare master key in case you accidentally lock your keys inside the vehicle.

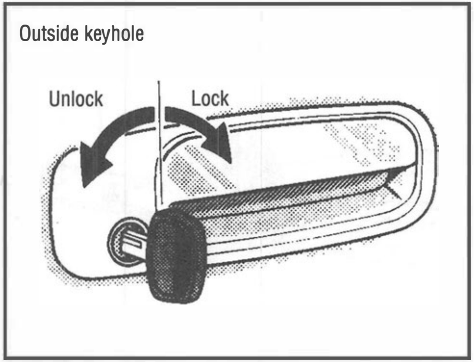


Keep the key number plate in a safe place such as your wallet, not in the vehicle.

If you should lose your keys or if you need additional keys, duplicates can be obtained at your Holden dealer using the key number.

You should also put a copy of the key number with your important papers.

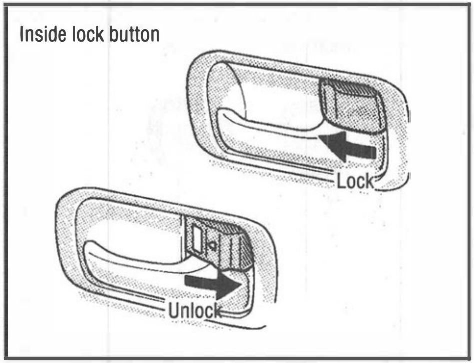
Door Locks -



LOCKING WITH KEY

Turn the key towards the front of the vehicle to lock and towards the back to unlock.

Vehicles with power door lock system- All the side doors, including station wagon tailgate, lock and unlock simultaneously with either front door.

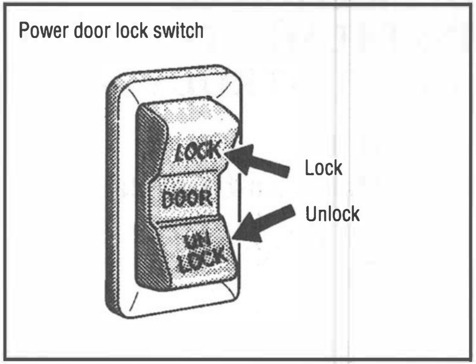


LOCKING WITH INSIDE LOCK BUTTON

Push the lock button forward to lock and backward to unlock the door.

Vehicles with a power door lock system- The driver's door can be opened from the inside even with the lock button in the lock position.

If you want to lock the door from the outside, set the button in the lock position before closing the door. The outside door handle must be held up while the front door is being closed. Be careful not to lock your keys in the vehicle.

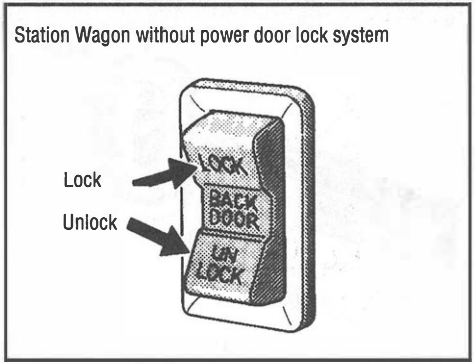


LOCKING WITH POWER DOOR LOCK SWITCH – SLX models with V6 engine and GS models

All doors (including station wagon tailgate) may be automatically locked or unlocked by using this switch.

Push the "LOCK" side of the switch briefly to lock all doors from inside the vehicle. To unlock all doors, push the "UNLOCK" side of the switch.

Each door can be individually unlocked with the door lock buttons.



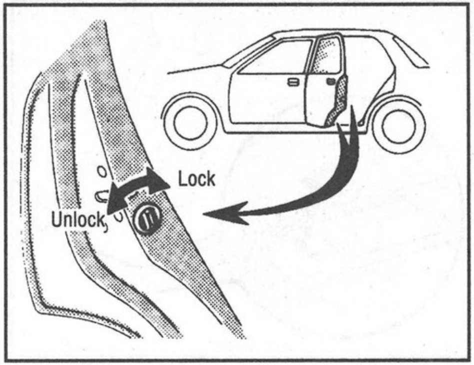
Station Wagon without power door lock system

LOCKING WITH POWER TAILGATE LOCK SWITCH - SLX model station wagons.

The tailgate may be automatically locked or unlocked by using the switch.

Push the "LOCK" side of the switch briefly to lock the tailgate. To unlock the tailgate, push the "UNLOCK" side of the switch.

You can, of course, lock and unlock the tailgate manually.



LOCKING WITH REAR DOOR CHILD PROTECTOR

To lock a rear door so that it does not open from the inside, turn the knob clockwise and then close the door. When locked using the rear door child protector alone, the rear door can only be opened from the outside.

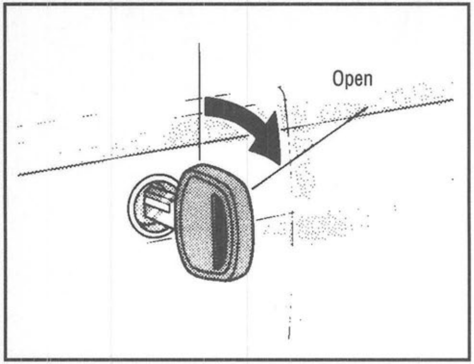
CAUTION:

Before driving, be sure that all the doors are closed.

When small children are on the rear seats of the vehicle, the child-protector system should be used to help prevent the doors from being opened unintentionally from the inside during driving.

continued overleaf

Trunk lid (Sedan)



To open the trunk lid, insert the master key and turn it clockwise.

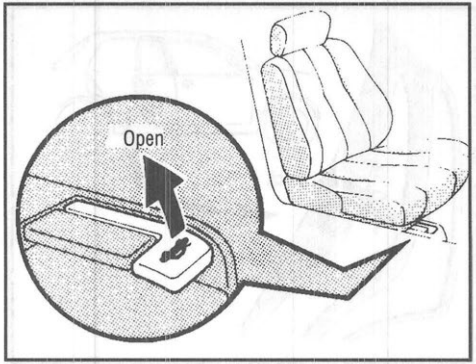
See "Luggage stowage precautions"in part 2 for precautions to observe when loading luggage.

To close the trunk lid, lower and press down on it. After closing the trunk lid, try pulling it up to make sure it is securely closed.

CAUTION:

Keep the trunk lid closed while driving. This not only keeps the luggage from being thrown out but also prevents exhaust gases from entering the vehicle.

Trunk lid opener

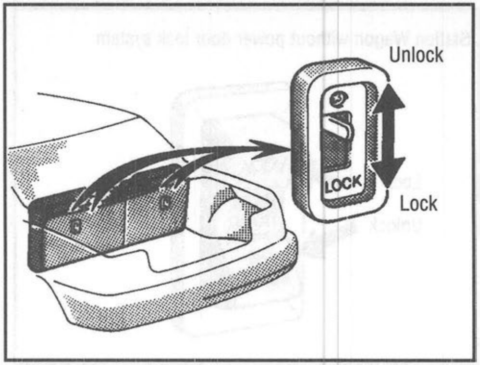


A trunk lid opener is situated on the floor, to the right of the driver's seat.

To open the trunk lid while sitting in the driver's seat, pull the lever up.

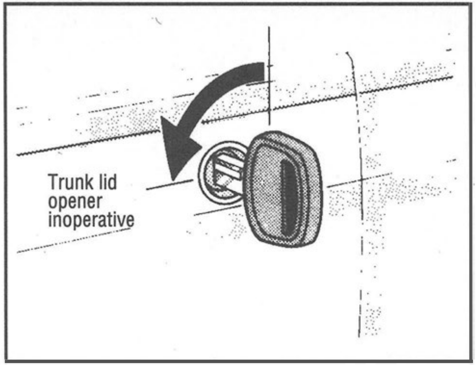
The trunk lid opener system will be cancelled by setting the trunk security system. (See "Trunk security system".)

Trunk security system — except SLX models with four cylinder engine



1. Open the trunk lid and lock the rear seatbacks with the two security locks.

After locking the rear seat backs, try folding them down to make sure they are securely locked.

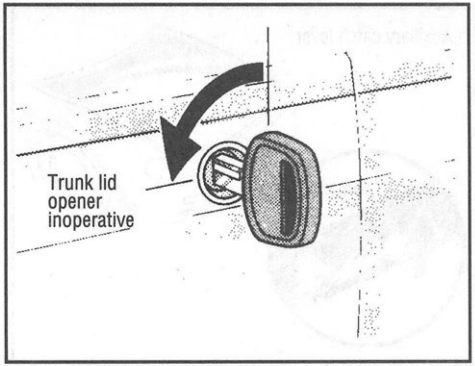


2. Insert the master key and turn it fully counter clockwise after closing the trunk lid.

After closing the trunk lid, try pulling it up to make sure it is securely closed.

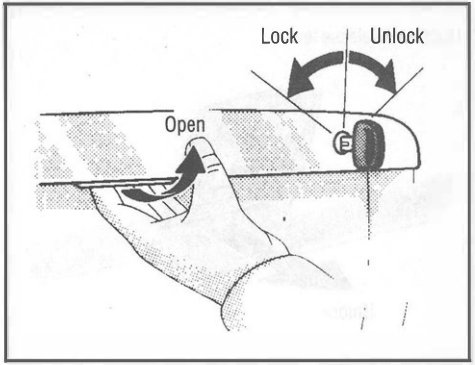
To protect things locked in the trunk, always use this feature when you have your vehicle parked.

Trunk security system - SLX models with four cylinder engine



If you turn the key fully counter clockwise after closing the trunk lid, the trunk lid lock release lever will not work. To help protect things locked in the trunk, always use this feature when you have your vehicle parked.

Tailgate – Station Wagon



To open the tailgate, insert the master key and turn it clockwise to unlock Then pull the handle and raise the door.

The tailgate will open completely by itself after it is raised about halfway.

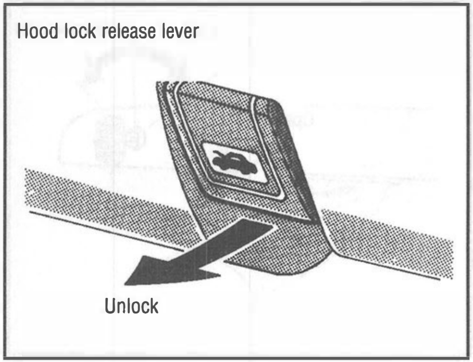
To close the tailgate, lower and press down on it. After closing the tailgate, try pulling it up to make sure it is securely closed.

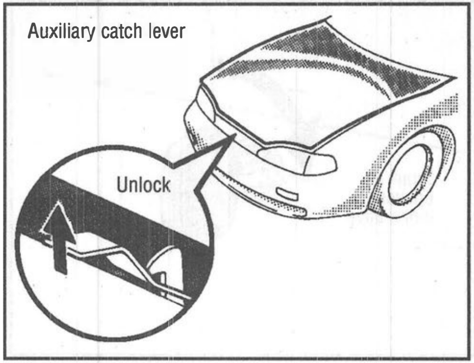
See "Lugguage stowage precautions" in part 2 for precautions to observe when loading lugguage.

CAUTION:

Keep the tailgate closed while driving. This not only keeps the luggage from being thrown out but also prevents exhaust gases from entering the vehicle.

Hood


Hood lock release lever
Unlock

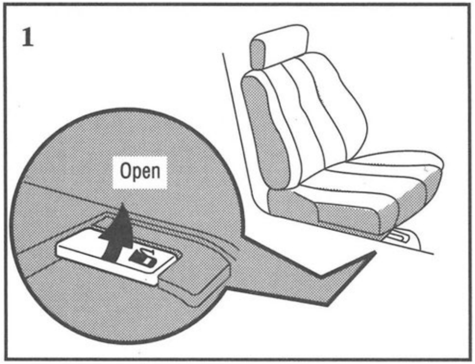

Auxiliary catch lever
Unlock

To open the hood, pull the hood lock release lever under the dash. The hood will spring up slightly. In front of the vehicle, press up on the auxiliary catch lever and lift the hood.

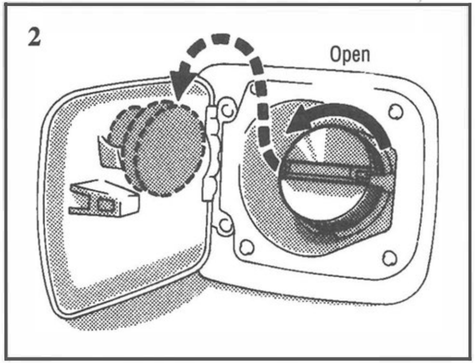
Before closing the hood, check to see that you have not forgotten any tools, rags, etc. Then lower the hood and make sure it locks into place. If necessary, press down gently on the front edge to lock it.

Fuel tank cap

1



2



1. A fuel filler door opener is situated on the floor, to the right of the driver's seat.

To open the fuel filler door, pull the lever up.

2. To remove the fuel tank cap, turn the cap slowly counter clockwise, then pause slightly before removing it.

It is not unusual to hear a slight swoosh when the cap is opened. When installing, turn the cap clockwise until you hear a click.

CAUTION:

- **Do not smoke, cause sparks or allow open flames near the vehicle when refuelling. The fumes are inflammable.**
- **When opening the cap, do not remove the cap quickly. Fuel may be under pressure and spray out of the fuel filler neck under hot weather conditions, etc., which may cause injury.**
- **Make sure that the cap is tightened securely to prevent fuel spillage in case of an accident.**
- **Use only a genuine Holden fuel tank cap for replacement. It has a built-in check valve.**

Part 1
OPERATION OF INSTRUMENTS AND CONTROLS —

Chapter 1-3
Seats, Seat belts, Steering wheel and Mirrors

- Front seats
- Head restraints
- Fold-down rear seat
- Seat belts
- Child restraint anchorages
- Tilt steering wheel
- Power rear view mirror control
- Folding rear view mirrors
- Anti-glare inside rear view mirror

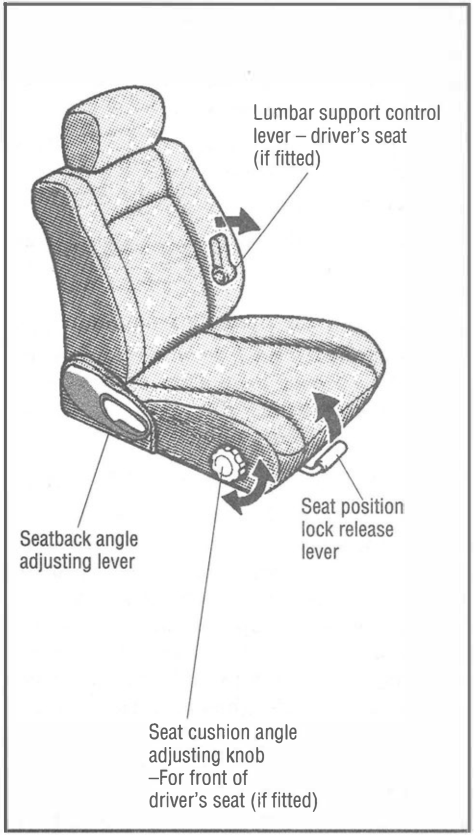
Front seats —
Seat adjustment precautions

Adjust the driver's seat so that the foot pedals, steering wheel and instrument panel controls are within easy reach of the driver.

CAUTION:

- **Adjustments should not be made while the vehicle is moving, as the seat may unexpectedly move and cause the driver to lose control of the vehicle.**
- **When adjusting the seat, be careful not to hit the seat against a passenger or luggage.**
- **After adjusting the seat position, try sliding it forward and backward to make sure it is locked in position.**
- **After adjusting the seat back, exert body pressure to make sure it is locked in position.**

Adjusting front seats


Lumbar support control lever – driver's seat (if fitted)
Seatback angle adjusting lever
Seat position lock release lever
Seat cushion angle adjusting knob –For front of driver's seat (if fitted)

continued overleaf

ADJUSTING SEAT POSITION

Pull the lock release lever up. Then slide the seat to the desired position with slight body pressure and release the lever.

Do not place anything under the front seats. It might interfere with the seat lock mechanism.

ADJUSTING SEAT BACK ANGLE

Lean forward and pull the lock release lever. Then lean back to the desired angle and release the lever.

After adjusting the seat back, exert body pressure to make sure it is locked in position. If desired, the seat backs may be fully reclined. They return to the upright position when the lever is lifted and no weight is on them.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

To reduce the risk of sliding under the lap belt during a collision, avoid reclining the seat back any more than needed. The seat belts provide maximum protection when the driver and the passenger are sitting up straight and well back into the seats. If you are reclined, the lap belt may slide past your hips and apply restraint forces directly to the abdomen. Therefore, in the event of a frontal collision, the risk of personnel injury may increase with increasing recline of the seat back.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

ADJUSTING DRIVER'S SEAT CUSHION ANGLE — IF FITTED.

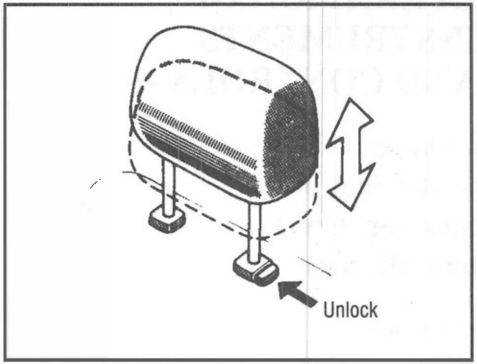
Turn the knob either way.

ADJUSTING DRIVER'S SEAT LUMBAR SUPPORT — IF FITTED.

Pull the lever forward and release.

Repeat this until you have a comfortable support.

Head restraints



To raise the head restraint, pull it up. To lower it, press the lock release button and push the head restraint down.

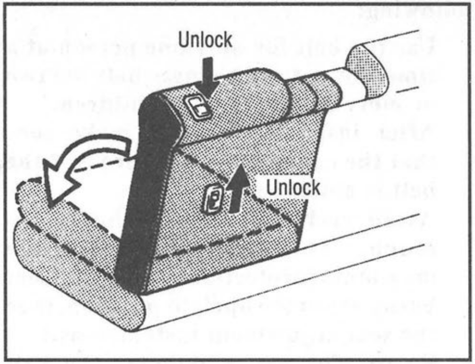
The head restraint is most effective when it is close to your head. Therefore, using a cushion on the seat back is not recommended.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

- **Adjust the top of the head restraint so that it is closest to the top of your ears.**
- **After adjusting the head restraint, make sure it is locked in position.**
- **Do not drive with the head restraint removed.**

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Fold-down rear seat back — Sedan (except SLX models with four cylinder engine)



Unlock the seat back and fold it down.

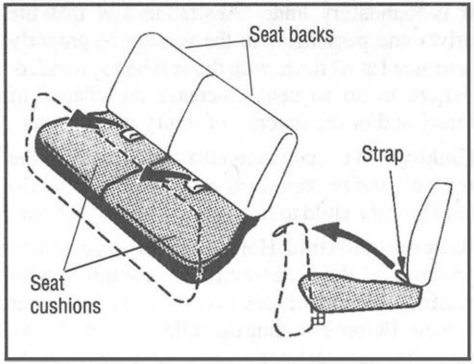
This will enlarge the trunk room as far as the front seat backs. See "Luggage stowage precautions" in Part 2 for precautions to observe when loading luggage.

If desired, each seat back may be folded separately.

CAUTION:

When returning the seat back to the upright position, make sure that it is securely locked by pushing forward and rearward on the top of the seat back. Check that the seat belts are in position.

Fold-down rear seat back and cushion — Station wagon



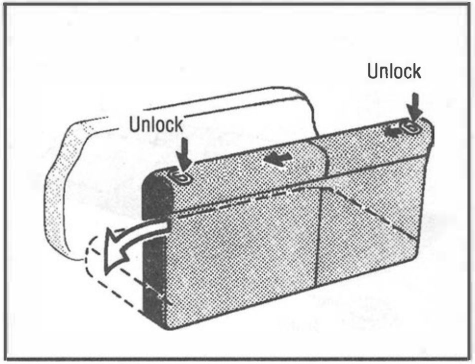
1. Swing the cushion up by pulling the strap.

It is hinged at the front edge, so just lift it up.

If desired, each cushion may be lifted separately.

CAUTION:

When returning the bottom cushion to its original position, make sure the seat belts are not twisted or caught under the bottom cushion and are arranged in their proper position for ready use.

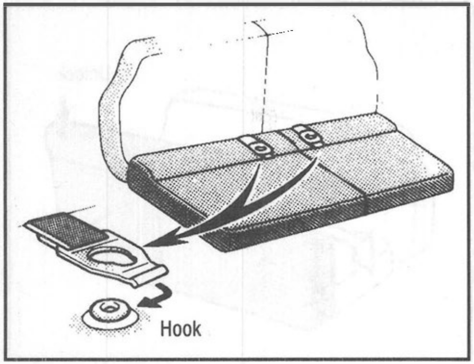


2. Unlock the seat back and fold it down.

This will enlarge the luggage compartment as far as the raised bottom cushion. See "Luggage stowage precautions" in Part 2 for precautions to observe when loading luggage.

If desired, each seat back may be folded separately.

continued overleaf



3. After folding the seat back down, hook the strap to the tab on the reverse side of the seat back.

CAUTION:

When returning the seat back to the upright position:

- **Make sure the seat belts are not twisted or caught in the seat back and are arranged in their proper position for ready use.**
- **Make sure the seat back is securely locked by pushing forward and rearward on the top of the seat back.**

Seat belts —
Seat belt precautions

It is mandatory under Australian law that the driver and passengers in the vehicle be properly restrained at all times with the seat belts provided. Failure to do so could increase the chance of injury and/or the severity of injury in accidents.

Children. We recommend that children sit in the rear seat and be restrained with the seat belts. Do not allow the child to stand up or kneel on the seat.

Baby or small child. Holden strongly recommend you use a child restraint that complies with Australian standards and is compatible with your vehicle. Before installing the child restraint, always read the manufacturer's instructions and ensure you read "Child restraint anchorages" in this chapter. Take care in ensuring the child restraint is properly fitted for your child's safety and comfort.

Pregnant woman. Holden recommends the use of a seat belt as required under Australian law. Ask your doctor for specific recommendations. The lap belt should be worn securely and as low as possible over the hips and not on the waist.

Injured person. Holden recommends the use of a seat belt as required under Australian law. Depending on the injury, however, first check with your doctor.

CAUTION:

When using the seat belts, observe the following:

- **Use the belt for only one person at a time. Do not use a single belt for two or more people — even children.**
- **After inserting the tab, make sure that the connection is secure and the belt is not twisted.**
- **Avoid reclining the seat backs too much. The seat belts provide maximum protection when the seat backs are in the upright position. (See the seat adjustment instructions.)**
- **Be careful not to damage the belt webbing or hardware and take care that they do not get caught or pinched in the seat or doors.**
- **Inspect the belt system periodically. Check for cuts, frays and loose parts. Damaged parts should be replaced. Do not disassemble or modify the system.**
- **Keep the belts clean and dry. If they need cleaning, use a mild soap solution or lukewarm water. Never use bleach, dye, or abrasive cleaners—they may severely weaken the belts.**
- **Replace the belt assembly if it has been used in a severe impact. The entire assembly should be replaced even if damage is not obvious.**

- Observe the following additional warnings.

WARNING: Seat belts are designed to bear upon the bony structure of the body and should be worn low across the front of the pelvis, or the pelvis, chest and shoulders as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

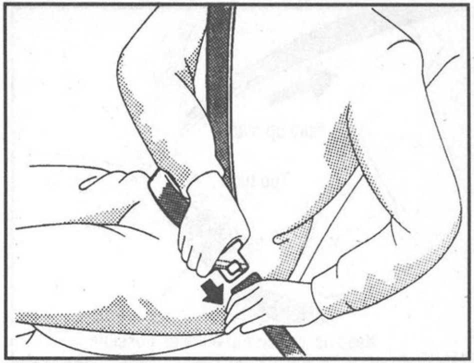
Belts should not be worn with straps twisted.

Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

WARNING: No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack or prevent the seat belt assembly from being adjusted to remove slack.

Failure to heed this warning may lead to severe injury or death.

Seat belts —3-point emergency locking retractor (ELR)



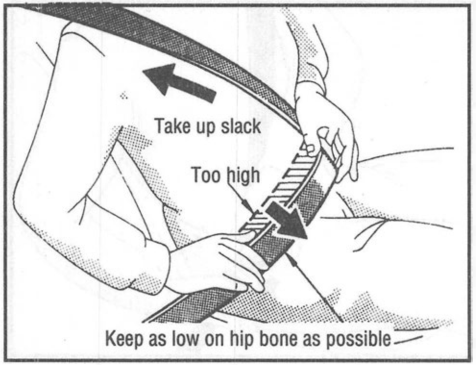
Adjust the seat as needed and sit up straight and well back in the seat. To fasten your belt, pull it out of the retractor and insert the tab into the buckle.

You will hear a click when the tab locks into the buckle.

The seat belt length automatically adjusts to your size and the seat position.

The retractor will lock the belt during a sudden stop or on impact. It also may lock if you lean forward too quickly. A slow, easy motion will allow the belt to extend and you can move around freely.

continued overleaf

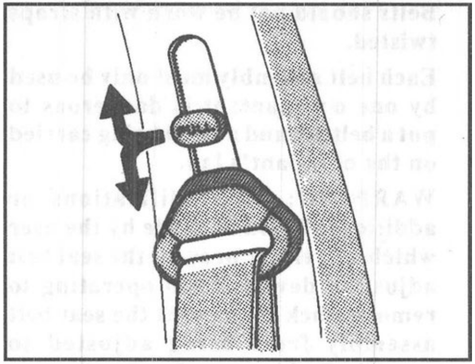

Take up slack
Too high
Keep as low on hip bone as possible

Adjust the position of the lap and shoulder belts.

Position the lap belt as low as possible on your hips, not on your waist, then adjust it to a snug fit by pulling the shoulder portion upward through the latch plate.

CAUTION:

- **High-positioned lap belts and loose-fitting shoulder belts both could increase the chance of injury or death due to sliding under the lap belt during an accident.**
- **For your safety, do not place the shoulder belt under your arm.**



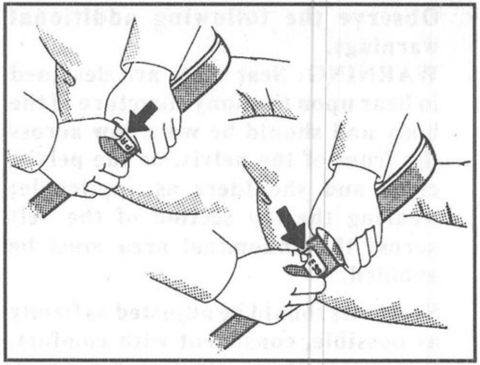
Seat belts with an adjustable shoulder anchor.

Adjust the shoulder anchor position to your size.

To adjust the anchor position, pull the knob out and slide it up or down. Release the knob and make sure the anchor is locked in position.

CAUTION:

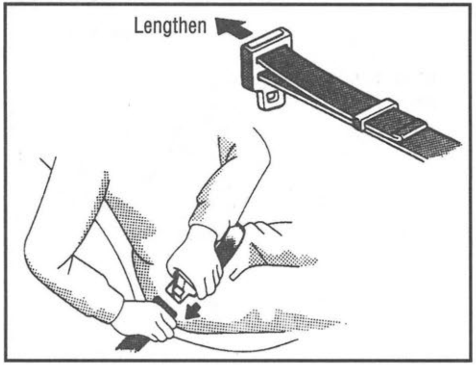
Always be sure that the belt is positioned across the shoulder, as close to your neck as possible and not on your upper arm or neck. Failure to do so could reduce the amount of protection in an accident and increase the chance of injury.



To release the belt, press the buckle release button and allow the belt to retract.

If the belt does not smoothly retract, withdraw the belt from the retractor and check for kinks or twists. Then make sure that it remains untwisted as it retracts.

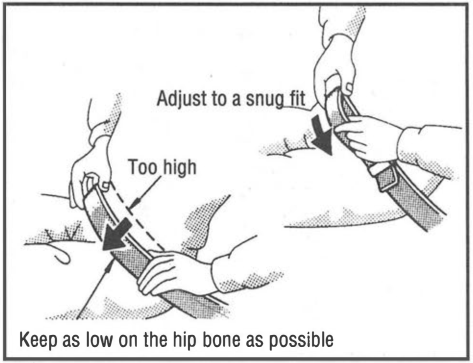
Rear seat belt
2-point (centre)



Sit up straight and well back in the seat. To fasten your belt, insert the tab into the buckle.

You will hear a click when the tab locks into the buckle.

If the belt is not long enough for you, hold the tab at a right angle to the belt and pull on the tab.


Adjust to a snug fit
Too high
Keep as low on the hip bone as possible

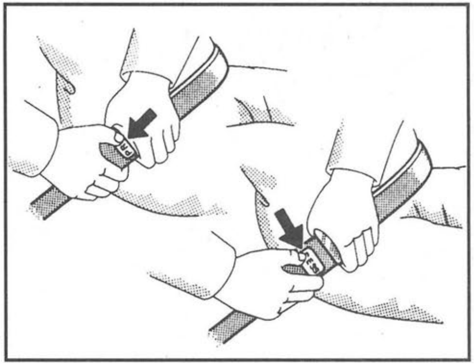
Remove excess length of the belt and adjust the belt position.

To shorten the belt, pull the free end of the belt.

Position the lap belt as low as possible on your hips, not on your waist, then adjust it to a snug fit.

CAUTION:

High-positioned lap belts could increase the chance of injury or death due to sliding under the lap belt during an accident.

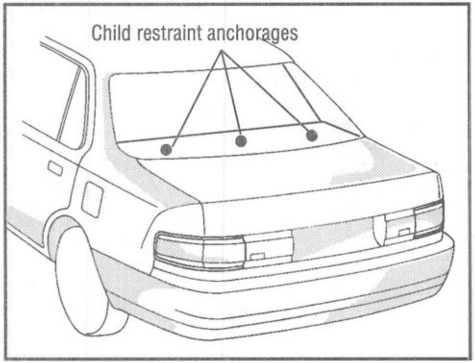


To release the belt, press the buckle release button.

NOTICE:

When the rear seat backs and cushion have been repositioned after having been folded, make sure that the seat belt tongue and buckle are positioned on top of the cushion so that they are accessible. See "Fold-down rear seats", chapter 1-3.

Child restraint anchorage – Sedan


Child restraint anchorages

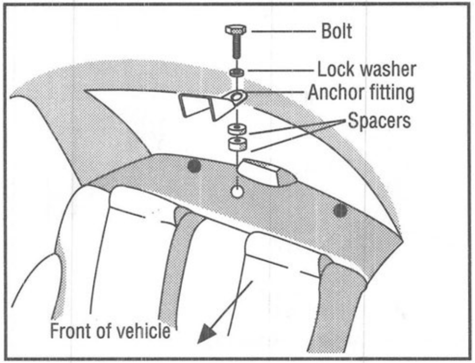
To facilitate installation of child restraints, the sedan has three child restraint anchorage points concealed beneath plugs in the rear parcel tray. When installing a child restraint, use the following instructions in conjunction with the child restraint manufacturer's installation instructions.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Fitting a child restraint is a safety-related procedure. Ensure that you follow these instructions carefully.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

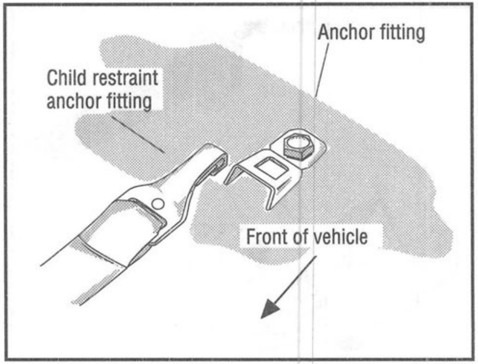
1. Remove the plastic cover plug immediately behind where the child restraint will be positioned on the rear seat. In the instance where only one child restraint is installed, Holden recommends positioning the restraint in the centre seating position of the rear seat.


Bolt
Lock washer
Anchor fitting
Spacers
Front of vehicle

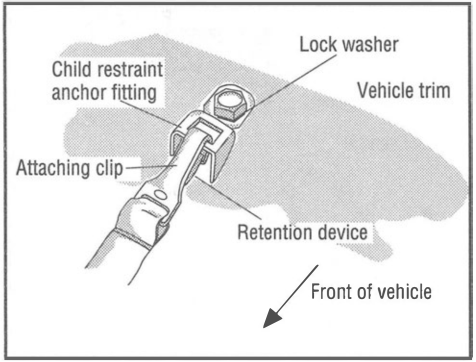
2. Install the child restraint anchorage fittings.

a.) Install 5/16" - 18 UNC x 30mm bolt through lock washer, anchor fitting and 15mm of spacers (one thick spacer and one thin spacer).

b.) Ensure bolt is securely tightened with the anchor fitting correctly orientated toward the front of the vehicle.


Anchor fitting
Child restraint anchor fitting
Front of vehicle

3. Attach the child restraint attaching clip to the anchor fitting. Make sure that the clip is securely attached.



CAUTION:

- **This vehicle has been manufactured for use with the type of child restraint anchor fitting shown above.**
- **Ensure attaching clip is properly engaged and retention device is correctly positioned as shown above.**
- **To ensure the 5/16" - 18UNC x 30mm attachment bolt has a minimum five full threads of engagement, the child restraint anchor fitting and lock washer must not exceed 5mm in total thickness when installed.**

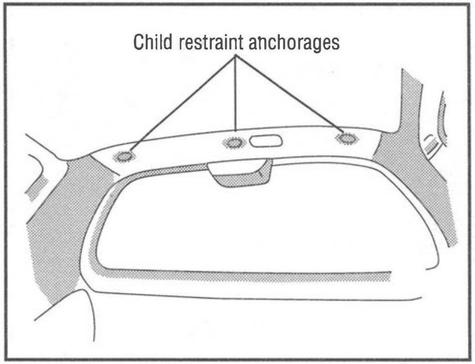
WARNING: Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

NOTICE:

If you travel with one of the seat backs folded and you are taking a child passenger, attach the chid restraint to the anchorage immediately behind the seat back that is not folded. See "Fold-down rear seats", chapter 1-3.

Child restraint anchorages - Station wagon



To facilitate installation of child restraints, the station wagon has three child restraint anchorage points concealed beneath plugs in the rear roof by the tailgate hinge. When installing a child restraint, use the following instructions in conjunction with the child restraint manufacturer's installation instructions.

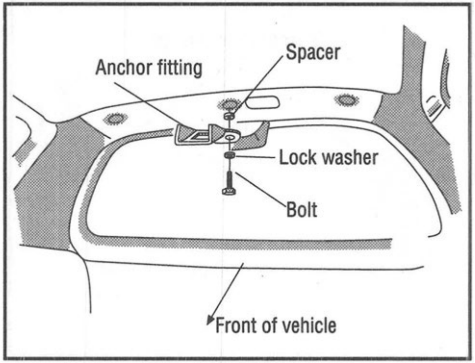
CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Fitting a child restraint is a safety-related procedure. Ensure that you follow these instructions carefully.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

1. Remove the plastic cover plug immediately behind where the child restraint will be positioned on the rear seat. In the instance where only one child restraint is installed, Holden recommends positioning the restraint in the centre seating position of the rear seat.

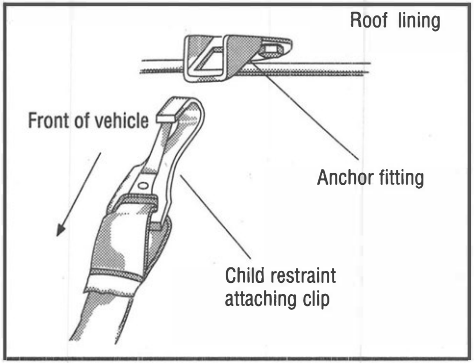
continued overleaf


Anchor fitting
Spacer
Lock washer
Bolt
Front of vehicle

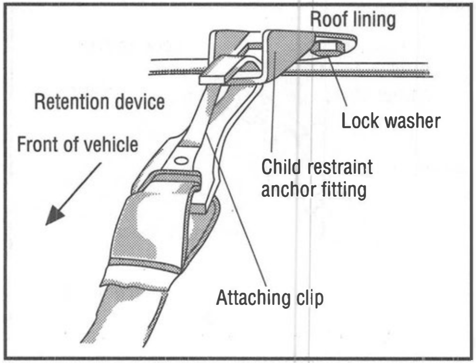
2. Install the child restraint anchorage fittings.

a.) Install 5/16" - 18 UNC x 30mm bolt through lock washer, anchor fitting and 10mm spacer (one thick spacer).

b.) Ensure bolt is securely tightened with the anchor fitting correctly orientated toward the front of the vehicle.


Roof lining
Front of vehicle
Anchor fitting
Child restraint attaching clip

3. Attach the child restraint attaching clip to the anchor fitting. Make sure that the clip is securely attached.


Roof lining
Retention device
Lock washer
Front of vehicle
Child restraint anchor fitting
Attaching clip

CAUTION:

- **This vehicle has been manufactured for use with the type of child restraint anchor fitting shown above.**
- **Ensure attaching clip is properly engaged and retention device is correctly positioned as shown above.**
- **To ensure the 5/16" - 18 UNC x 30mm attachment bolt has a minimum five full threads of engagement, the child restraint anchor fitting and lock washer must not exceed 5mm in total thickness when installed.**

- **To avoid inadvertent injury by contact with installed anchor fitting (eg. when loading or unloading through tailgate), Holden recommends that the child restraint anchor fitting be removed when not in use.**

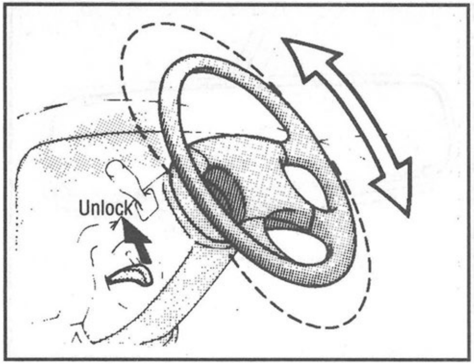
WARNING: Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

NOTICE:

If you travel with one of the seat backs folded and you are taking a child passenger, attach the chid restraint to the anchorage immediately behind the seat back that is not folded. See "Fold-down rear seats", chapter 1-3.

Tilt steering wheel



To change the steering wheel angle, pull up the lock release lever, tilt the steering wheel to the desired angle and release the lever.

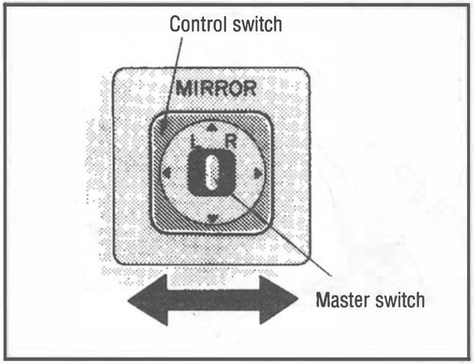
The steering wheel will spring up to the highest position when the lock release lever is pulled up.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

- **This adjustment should not be made while the vehicle is moving.**
- **After adjusting the steering wheel, try moving it up and down to make sure it is locked in position.**

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Power rear view mirror control



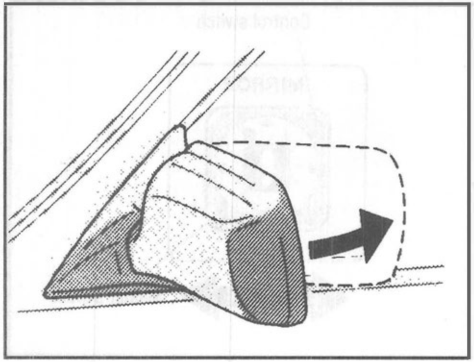
To adjust the power rear view mirror, first place the master switch at "R" (right) or "L" (left) depending on which mirror needs adjusting, then push the control switch in the desired direction.

If the engine is not running, the key must be in the "ACC" position.

NOTICE:

If ice should jam the mirror, do not operate the control or scrape the mirror face. Use a spray de-icer to free the mirror.

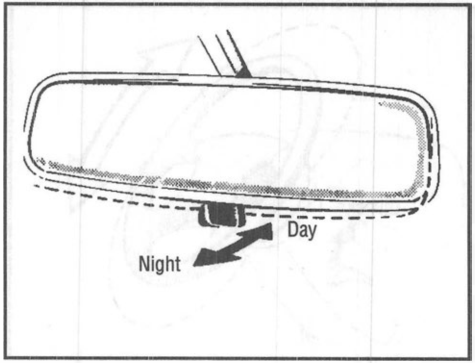
Folding rear view mirrors



To fold the rear view mirror, push backward.

The rear view mirrors can be folded backward for parking in restricted areas or when running your vehicle through an automatic car wash to reduce the possibility of damage.

Anti-glare inside rear view mirror



Pull the lever toward you to reduce glare from the headlights of the vehicle behind you during night driving.

Before adjusting the mirror to the position with most clarity, push the day-night change lever away from you (daylight driving position).

Remember that by reducing glare you also lose some rear view clarity.

Part 1

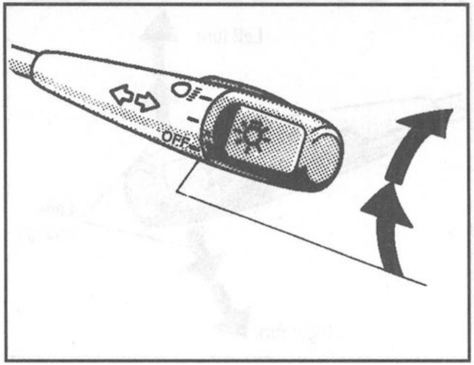
OPERATION OF INSTRUMENTS AND CONTROLS —

Chapter 1-4

Lights, Wipers and Defogger

- Headlight and turn signal switch
- Emergency flasher switch
- Instrument panel light control
- Interior light
- Ignition switch light
- Windshield wiper and washer switch
- Rear window wiper and washer switch
- Luggage compartment light
- Rear window defogger switch

Headlight and turn signal switch



To turn the lights on, twist the knob on the end of the lever.

FIRST CLICKSTOP: Only the parking, tail, license plate and instrument panel lights turn on.

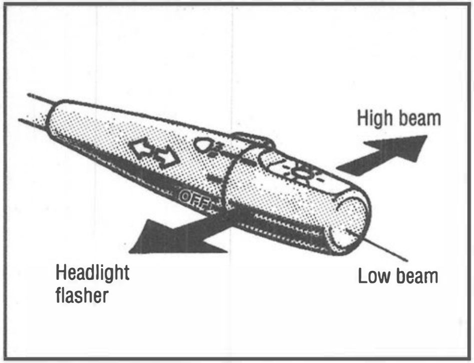
SECOND CLICKSTOP: The headlights also turn on.

Should the headlights be inadvertently left switched on, the headlights will turn off automatically when the driver's door is opened with ignition turned off. To turn them on again, turn the key to "ON" position or actuate the headlight switch.

NOTICE:

To prevent the battery from being discharged, do not leave the lights on for a long period while the engine is not running.

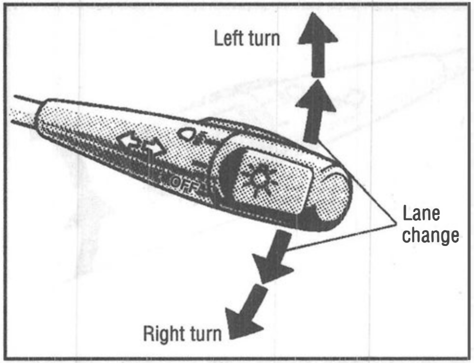
continued overleaf



To change from low beam to high beam, push the lever away from you. Pull it toward you to return to low beam. To flash the headlights, pull the lever towards you from the low beam position.

A blue light on the dashboard indicates high beam is on.

The headlight flasher works even when the headlight switch is off.

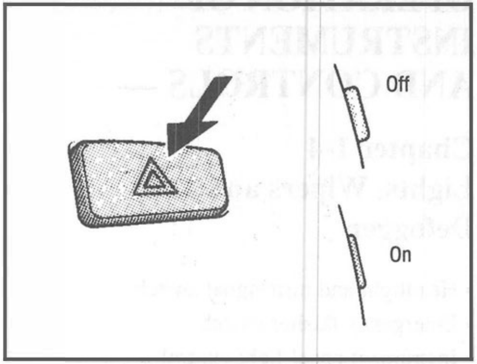


For signalling turns, move the lever up or down in the conventional manner.

The key must be in the "ON" position.

The turn signal is self-cancelling after a turn, but after a lane change, you may have to cancel it by hand. You can also signal a lane change by moving the turn signal lever partway and holding it there. If the green dashboard light flashes faster than normal, it indicates that a front or rear turn signal bulb has burned out.

Emergency flasher switch



To turn on the emergency flashers, push in the switch.

All the turn signal lights will flash .

Turn on the emergency flashers to warn other drivers if your vehicle must be stopped where it might be a traffic hazard.

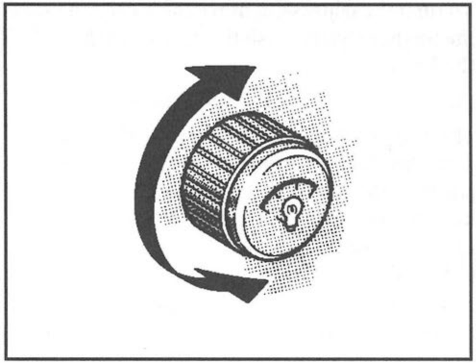
Always pull as far off the road as possible.

The turn signal light switch will not work when the emergency flashers are operating.

NOTICE:

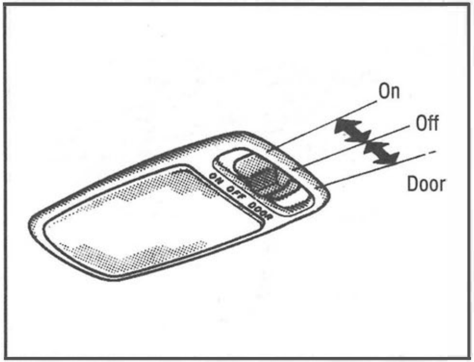
To prevent the battery from being discharged, do not leave the switch on longer than necessary when the engine is not running.

Instrument panel light control



To adjust the brightness of the instrument panel lights, turn the knob.

Interior light



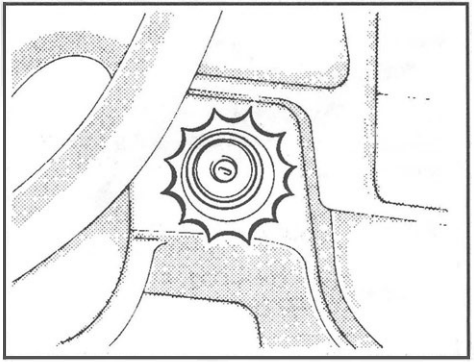
The interior light switch has three positions.

"ON": The light stays on with the door opened or closed regardless of any other switches.

"DOOR": The light comes on while any door is opened.

"OFF": The light remains off even with a door opened.

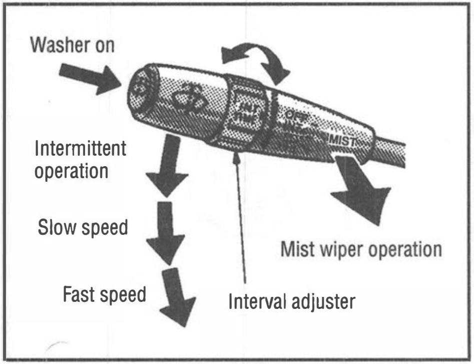
Ignition switch light—Except SLX models with four cylinder engine



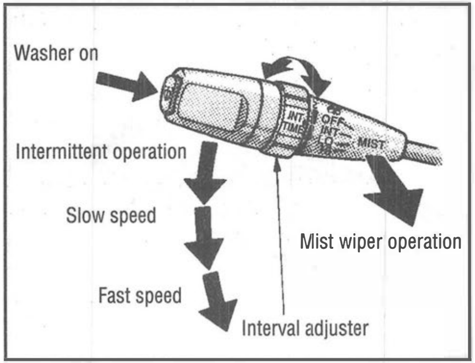
For easy access to the ignition switch, the ignition switch light is designed to come on when any of the side doors are opened.

The light remains on for a certain time after they are closed.

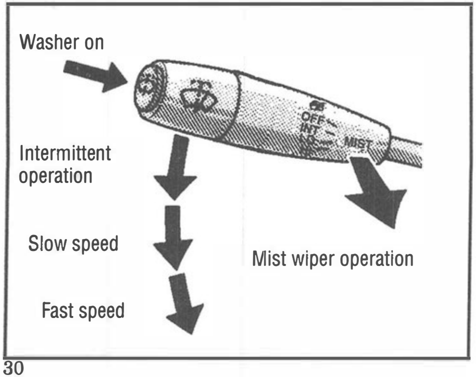
Windshield wiper and washer switch – GS model sedans


Washer on
Intermittent operation
Slow speed
Fast speed
Mist wiper operation
Interval adjuster
INT
OFF
MIST

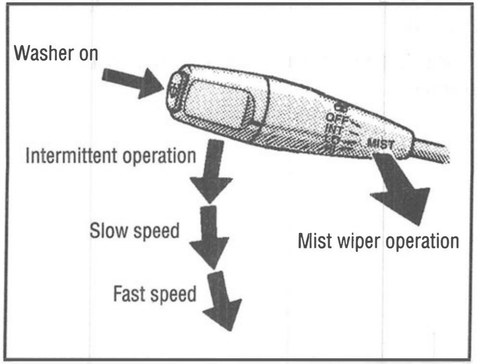
GS model station wagon


Washer on
Intermittent operation
Slow speed
Fast speed
Mist wiper operation
Interval adjuster
INT
TIME
OFF
INT
LO
MIST

SLX model sedans


Washer on
Intermittent operation
Slow speed
Fast speed
Mist wiper operation
OFF
INT
LO
MIST

SLX model station wagons


Washer on
Intermittent operation
Slow speed
Fast speed
Mist wiper operation
OFF
INT
LO
MIST

To turn the wipers on, move the lever. To make the washer squirt, push the button on the end of the lever.

The key must be in the "ON" position.

The wipers will operate at intervals when the lever is in the "INT" position. With the lever in this position, the wipers can be adjusted to operate at intervals of 3 to 10 seconds depending on the interval adjusting setting between "S" and "F" (GS models only).

If a single wipe is desired in mist, push the lever to the "MIST" position and release it.

Also, the wipers will automatically operate a couple of times after the washer squirts even with the lever in the "OFF" position.

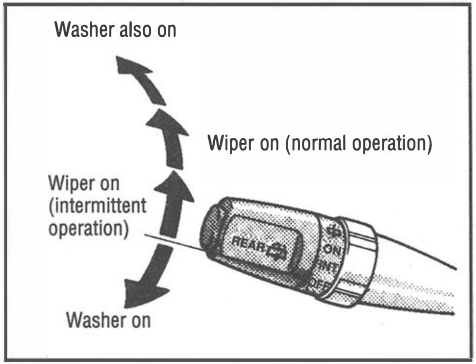
If the washer does not work, check to see whether the washer tank is empty. For information on adding washer fluid, see "Adding washer fluid" in chapter 7-3.

In cold weather, warm the windshield with the defroster before using the washer. This will help prevent icing which could block your vision.

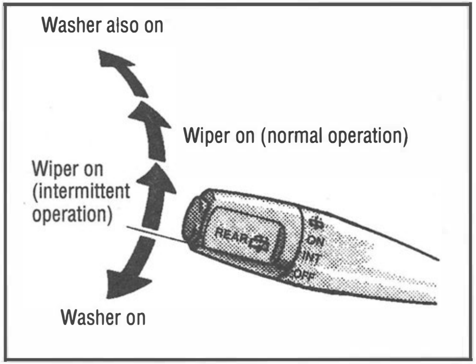
NOTICE:

Do not operate the wipers if the windshield is dry. Doing so may scratch the glass.

Rear window wipers and washer switch-GS model station wagon


Washer also on
Wiper on (normal operation)
Wiper on (intermittent operation)
REAR
ON
INT
OFF
Washer on

SLX model station wagons


Washer also on
Wiper on (normal operation)
Wiper on (intermittent operation)
REAR
ON
INT
OFF
Washer on

To turn the rear wiper and washer on, twist the knob at the end of the lever.

The key must be in the "ON" position.

The wiper will operate at intervals when the knob is in the "INT" position.

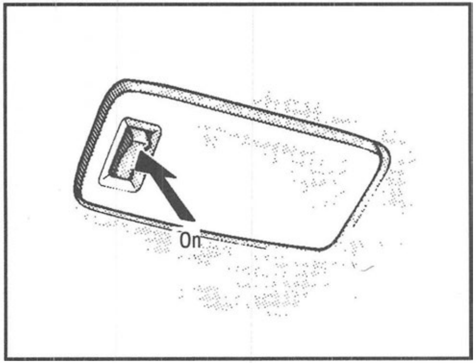
The washer squirts at the two marked knob positions. The knob will automatically return from these positions when it is released.

If the washer does not work, check to see whether the washer tank is empty. For information on adding washer fluid, see "Adding washer fluid" in Chapter 7-3.

NOTICE:

Do not operate the rear wiper if the rear window is dry. Doing so may scratch the glass.

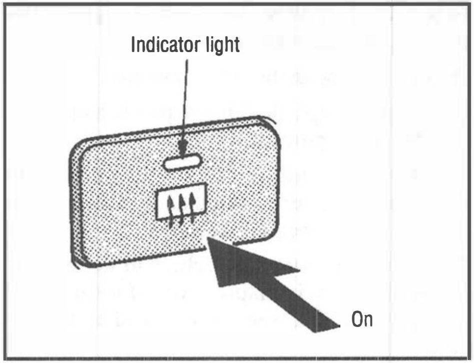
Luggage compartment light (station wagon)



To turn the luggage compartment light on, open the tailgate and push the switch. Closing the tailgate will turn the light off.

With the switch in the "ON" position, the light will automatically turn on when the tailgate is opened and turn off when closed.

Rear window defogger switch



To defog or defrost the rear window, push the switch.

The key must be in the "ON" position.

The thin heater wires on the inside of the rear window will quickly clear the window surface. An indicator light will illuminate to indicate the defogger is operating.

This system will automatically turn off after the defogger has operated for about 15 minutes.

If further defrosting or defogging is desired, simply actuate the switch again. When the surface has cleared, push the switch once again to turn the defogger off. Continuous use may cause the battery to discharge, especially during stop and go driving. The defogger is not designed for drying rain water or for melting snow.

NOTICE:

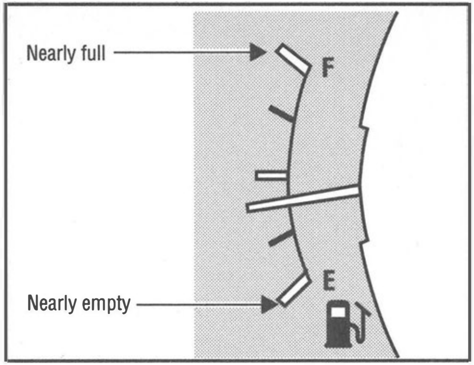
When cleaning the inside of the rear window, be careful not to scratch or damage the heater wires.

Part 1
OPERATION OF INSTRUMENTS AND CONTROLS —

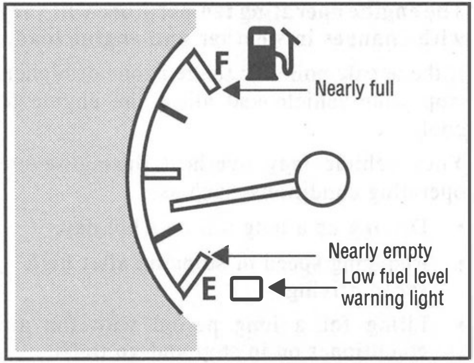
Chapter 1-5
Gauges, Meters and Warning lights

- Fuel gauge
- Engine temperature gauge
- Tachometer
- Odometer and trip meter
- Warning lights

Fuel gauge — SLX models with V6 engine, GS models


Nearly full
F
E
Nearly empty

SLX models with four cylinder engine


F
Nearly full
Nearly empty
E
Low fuel level warning light

The gauge indicates the approximate quantity of fuel remaining in the tank.

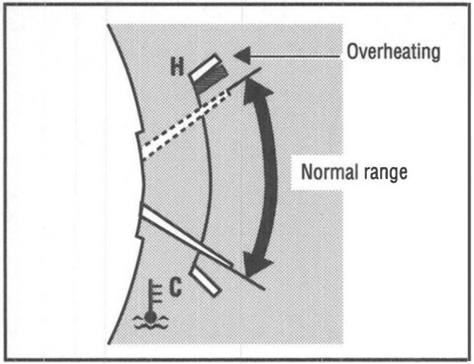
It is a good idea to keep the tank over 1/4 full.

This fuel gauge has a non-return type needle. Therefore, the needle will remain at the indicated fuel level position regardless of the ignition switch position.

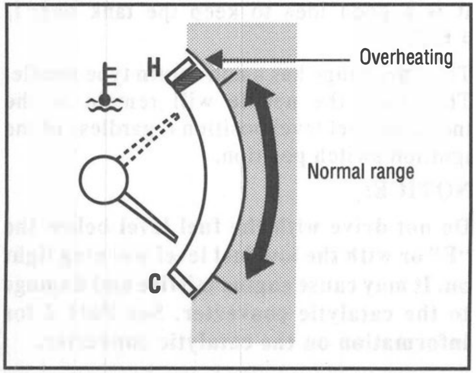
NOTICE:

Do not drive with the fuel level below the "E" or with the low fuel level warning light on. It may cause engine misfire and damage to the catalytic converter. See Part 2 for information on the catalytic converter.

Engine temperature gauge — SLX models with V6 engine, GS models



Engine temperature gauge — SLX models with four cylinder engine



The gauge indicates the engine coolant temperature when the ignition switch is on. The engine operating temperature will vary with changes in weather and engine load.

If the needle points to the red zone or higher, stop your vehicle and allow the engine to cool.

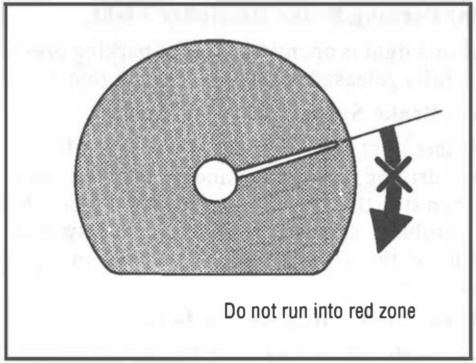
Your vehicle may overheat during severe operating conditions, such as:

- Driving up a long hill on a hot day.
- Reducing speed or stopping after high speed driving.
- Idling for a long period with the air conditioner on in stop-and-go traffic.
- Towing a trailer.

NOTICE:

Do not continue driving with an overheated engine. See "If your vehicle overheats", in Part 4.

Tachometer — if fitted



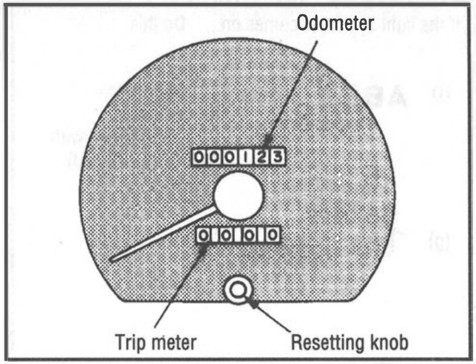
The tachometer indicates engine speed in thousands of revolutions per minute (rpm). Use it while driving to select correct shift points and to prevent engine lugging and over revving.

Driving with the engine running too fast causes excessive engine wear and poor fuel economy. Remember, in most cases the slower the engine speed, the greater the fuel economy.

NOTICE:

Do not run the needle into the red zone. This may cause severe engine damage.

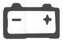
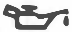
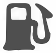
Odometer and trip meter

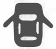
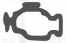


The odometer records the total distance the car has been driven. The trip meter may be set to record the distance on each trip. To set the trip meter, press the knob in and release it.

The black digits on a white background indicate tenths of kilometres travelled.

Warning lights

	If the light comes on...	Do this.
(a)	**PARK BRAKE**	Release parking brake.
(b)	**BRAKE**	Stop and check.
(c)		Stop and check.
(d)		Stop and check
(e)		Fill up fuel tank.

	If the light or buzzer comes on...	Do this.
(f)	**ABS**	Take vehicle to Holden dealer. (SLX, GS models with V6 Engine - if fitted)
(g)		Close all doors.
(h)		Take vehicle to Holden Dealer

(a) Parking Brake Reminder Light

If this light is on, make sure the parking brake is fully released. The light should go off.

(b) Brake System Warning Light

If this light comes on and stays on while you are driving, slow down and pull off the road. Then stop the vehicle carefully. There may be a problem somewhere in the brake system. Check the fluid level of the see-through reservoir.

If the brake fluid level is low...

At a safe place, test your brakes by starting and stopping.

- If you judge that the brakes still work adequately, drive cautiously to your nearest dealer or shop for repairs.
- If the brakes are not working, have the vehicle towed in for repairs. (For towing information, see Part 4.)

CAUTION:

Continued normal driving with a low brake fluid level is dangerous.

If the brake fluid level is correct...

Have the warning system checked by your Holden dealer.

(c) Battery discharge Warning Light

This light warns that the battery is being discharged.

If it comes on while you are driving, there is a problem somewhere in the charging system.

The engine ignition will continue to operate however, until the battery is discharged. Turn off the air conditioner, blower, radio, etc., and drive directly to the nearest Holden dealer or repair shop.

(d) Low Oil Pressure Warning Light

This light warns that the oil pressure is too low.

If it flickers or stays on while you are driving, pull off the road to a safe place and stop the engine immediately. Call a Holden dealer or qualified repair shop for assistance.

The light may occasionally flicker when the engine is idling or it may come on briefly after a hard stop. There is no cause for concern if it then goes out when the engine is accelerated slightly.

The light may come on when the oil level is extremely low. It is not designed to indicate low oil level and the oil level must be checked using the level dipstick.

NOTICE:

Do not drive the vehicle with the warning light on, even for a short distance, until the cause is fixed. It may damage the engine.

(e) Low Fuel Level Warning Light

This light indicates that the fuel tank is nearly empty. Fill up the tank as soon as possible.

(f) Anti-lock Brake System Warning Light

This light warns that there is a problem somewhere in your anti-lock brake system. When the anti-lock brake system warning light is on (and the brake system warning light is off), the brake system operates conventionally but without anti-lock function.

If it comes on while you are driving, have your vehicle checked by your Holden dealer as soon as possible.

Note:

During normal operation, the anti-lock brake system warning light will come on for 3 seconds when the ignition is turned on.

(g) Open Door Warning Light

This light remains on until all the side doors and tailgate (station wagon) are completely closed.

(h) Engine System Warning Light

This light warns that there is a problem somewhere in your engine electrical system.

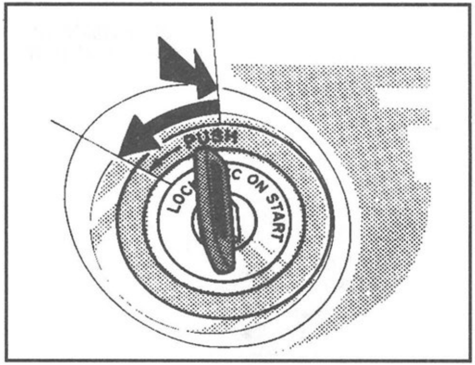
If it comes on while you are driving, have your vehicle checked/repaired by your Holden dealer as soon as possible.

Part 1
OPERATION OF INSTRUMENTS AND CONTROLS —

Chapter 1-6
Ignition switch, Transmission and Parking brake

- Ignition switch with steering lock
- Automatic transmission
- Manual transmission
- Parking brake

Ignition switch with steering lock



"START" — Starter motor on. The key will return to the "ON" position when released.

For starting tips, see Part 3.

"ON" — Engine on and all accessories on.

This is the normal driving position.

"ACC" — Accessories such as the radio operate, but the engine is off.

"LOCK" — Engine is off and the steering wheel is locked. The key can be removed only at this position.

You must push in the key to turn it from "ACC" to the "LOCK" position.

When starting the engine, the key may seem stuck at the "LOCK" position. To free it, first be sure the key is pushed all the way in, then rock the steering wheel slightly while turning the key gently.

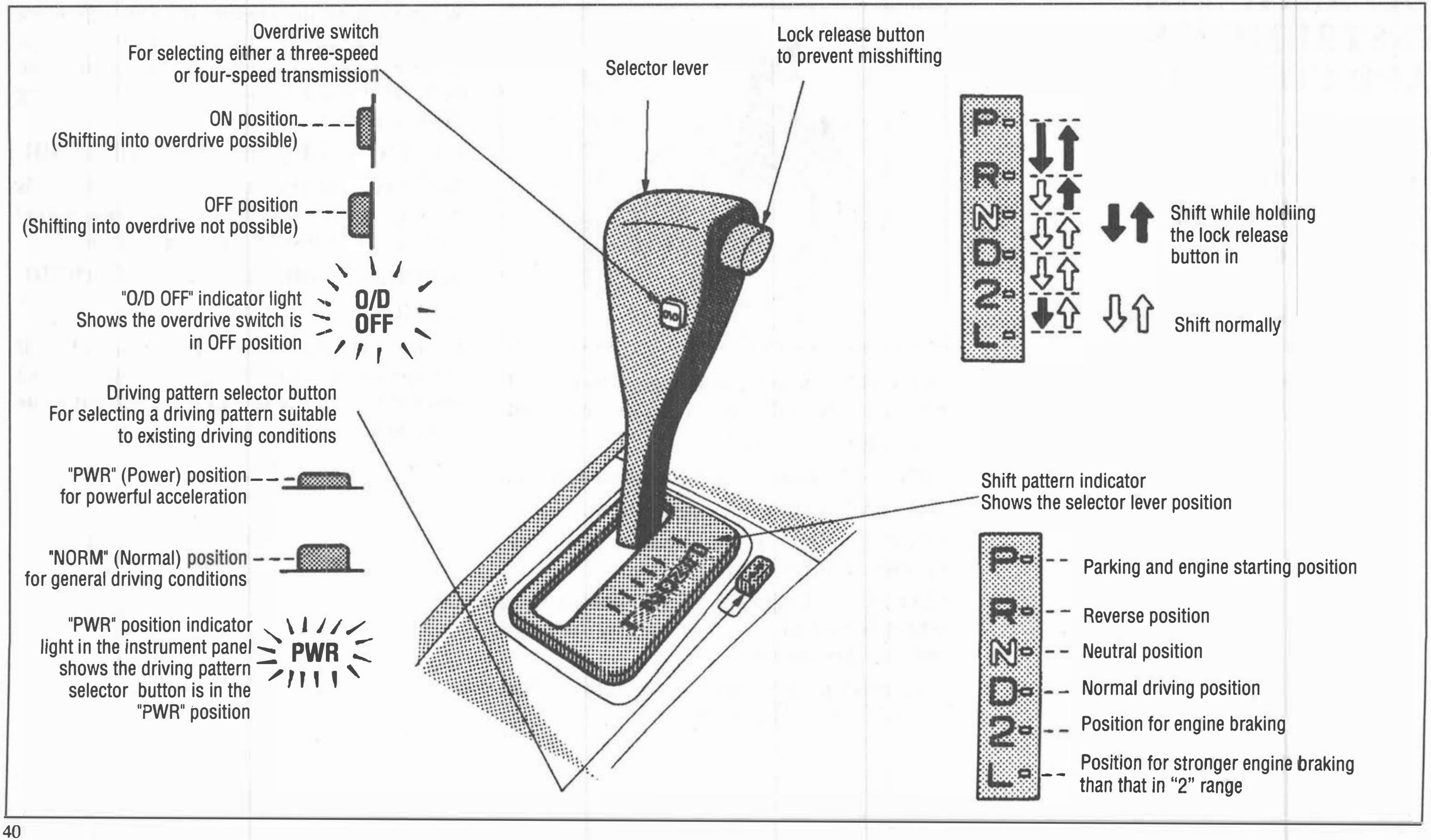
CAUTION:

Never remove the key when the vehicle is moving, as this will lock the steering wheel and result in loss of steering control.

NOTICE:

Do not leave the key in the "ON" position if the engine is not running. The battery will discharge and the ignition system could be damaged.

Automatic transmission



Overdrive switch
For selecting either a three-speed or four-speed transmission

ON position
(Shifting into overdrive possible)

OFF position
(Shifting into overdrive not possible)

"O/D OFF" indicator light
Shows the overdrive switch is in OFF position

Driving pattern selector button
For selecting a driving pattern suitable to existing driving conditions

"PWR" (Power) position for powerful acceleration

"NORM" (Normal) position for general driving conditions

"PWR" position indicator light in the instrument panel shows the driving pattern selector button is in the "PWR" position

Selector lever

Lock release button to prevent misshifting

Shift while holdiing the lock release button in

Shift normally

Shift pattern indicator
Shows the selector lever position

P -- Parking and engine starting position

R -- Reverse position

N -- Neutral position

D -- Normal driving position

2 -- Position for engine braking

L -- Position for stronger engine braking than that in "2" range

(a) Normal driving

1. Start the engine as instructed in “How to start the engine” in Part 3.

The transmission must be in “P’ or “N”. The engine will not start in “R”, “2”, “L” or “D” range even if the key is turned.

2. Set the driving pattern selector button to the “NORM” position.

Your transmission is fitted with a driving pattern selector button which allows you to select either “NORM” or “PWR” to suit your driving condition. For ordinary driving, Holden recommends that you use the “NORM” position to improve fuel economy. For powerful acceleration, use the “PWR” position. In the “PWR” position, the “PWR” position indicator light in the instrument panel is on and the transmission is shifted up and down at a higher vehicle speed than in the “NORM” position.

3. Push the overdrive switch to set it on.

Always turn the overdrive switch on for better fuel economy and quieter driving. (See “(b) Using engine braking” and “(f) Good driving practice” for exceptions).

4. With your foot holding down the brake pedal, shift the selector lever to “D”.

CAUTION:

Never put your foot on the accelerator pedal while shifting.

5. Release the parking brake and brake pedal. Depress the accelerator pedal slowly for smooth starting.

The vehicle will start in the first gear and automatically shift to the second, third and overdrive gears according to the vehicle speed. However, while the engine coolant temperature is low and the vehicle is travelling at low speed, the transmission will not be shifted into the overdrive gear even with the overdrive switch on.

In “D” range, the automatic transmission system will select the most suitable gear for the running conditions such as hill climbing, hard towing, etc.

If you need to accelerate rapidly while driving, push the accelerator pedal all the way to the floor. The transmission will automatically downshift to the third, second or first gear, according to the vehicle speed.

If engine braking is needed, such as in descending a long hill, see “(b) Using engine braking.”

(b) Using engine braking

To use the braking power of the engine, downshift the transmission in the way described below:

- Turn off the overdrive switch. (This is effective only when you are driving in the “D” range). The “O/D OFF” indicator light will come on and the transmission will downshift to the third gear.
- Shift into the “2” range. The transmission will downshift to the second gear when the vehicle speed is or becomes lower than the speed listed below and more powerful engine braking will be obtained.
- Shift into the “L” range. The transmission will downshift to the first gear when the vehicle speed is or becomes lower than the speed listed below and maximum engine braking will be applied.

5S-FE engine
“2” ....98 km/h
“L” ....54 km/h

3VZ-FE engine
“2” ....99 km/h
“L” ....54 km/h

continued overleaf

CAUTION:

Be careful when downshifting on a slippery surface. Abrupt shifting could cause the vehicle to spin or skid .

(c) Using the "2" and "L" ranges

The "2" and "L" ranges are used for strong engine braking as described previously.

With the selector lever in "2" or "L", you can start the vehicle in motion as with the lever in "D".

With the selector lever in "2", the vehicle will start in the first gear and automatically shift to the second gear.

With the selector lever in "L", the transmission is engaged in the first gear.

NOTICE:

Be careful not to overrev the engine. The following maximum allowable speed (approximate) for each range is given for your reference:

5S-FE engine

"2" .... 98 km/h

"L" .... 54 km/h

3VZ-FE engine

"2" .... 99 km/h

"L" .... 54 km/h

Do not continue hill climbing or hard towing for a long time in the "2" or "L" range. This may cause severe automatic transmission damage from overheating. To prevent such damage, "D" range should be used in hill climbing or hard towing.

(d) Reversing

1. Bring the vehicle to a complete stop.

2. With the brake pedal held down with your foot, shift the selector lever to the "R" range.

NOTICE:

Never shift into reverse while the vehicle is in motion.

(e) Parking

1. Bring the vehicle to a complete stop.

2. Pull the parking brake lever up fully to securely apply the parking brake.

3. Hold the brake pedal down with your foot, shift the selector lever to the "P" range.

CAUTION:

While the vehicle is in motion, never attempt to move the selector lever into "P" under any circumstances. Serious mechanical damage and loss of vehicle control may result.

(f) Good driving practice

- If the transmission is repeatedly upshifted and downshifted between the third and overdrive gears when climbing a gentle slope, it is suggested that the overdrive switch be turned off. Be sure to turn the switch on immediately afterward.
- When towing a trailer, in order to maintain engine braking efficiency, do not use overdrive.

CAUTION:

Always keep your foot on the brake pedal while stopped with the engine running. This prevents the vehicle from creeping.

NOTICE:

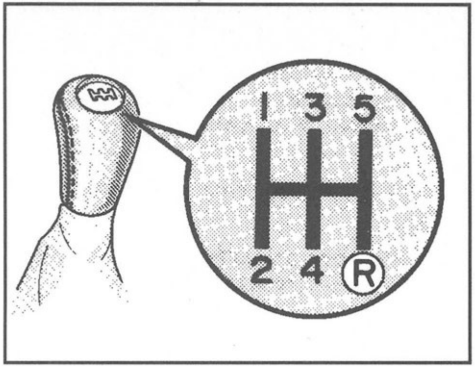
Do not hold the vehicle on an upgrade with the accelerator pedal. It can cause the transmission to overheat. Always use the brake pedal or parking brake.

(g) If the "O/D OFF" indicator light flashes

Contact your Holden dealer as soon as possible. There may be a problem in the transmission system.

Important: The maximum allowable speeds given in this section are those recommended by Holden. The maximum driving speed is governed by State Law.

Manual transmission



The shift pattern is conventional as shown above.

Press the clutch pedal down fully while shifting and then release it slowly. Do not rest your foot on the pedal while driving as damage to the clutch may occur. Avoid using the clutch to hold the vehicle when stopped on an uphill grade - use the parking brake.

Recommended shifting speeds.

The transmission is fully synchronized and upshifting or downshifting is easy.

For the best compromise between fuel economy and vehicle performance, you should upshift or downshift at approximately the following speeds:

Upshifting

gear	km/h
1 to 2	24
2 to 3	40
3 to 4	65
4 to 5	72

Downshifting

gear	km/h
2 to 1	20
3 to 2	30
4 to 3	40
5 to 4	50

Upshifting too soon or downshifting too late will cause lugging and possibly pinging. Regularly revving the engine to maximum speed in each gear will cause excessive engine wear and high fuel consumption.

Maximum allowable speeds

To get on a highway or to pass slower traffic, maximum acceleration may be necessary. Make sure you observe the following maximum allowable speeds in each gear:

5S-FE engine

gear	km/h
1	46
2	74
3	114
4	147

NOTICE:

Do not downshift if you are going faster than the maximum allowable speed for the next lower gear.

continued overleaf

Good driving practice

- If it is difficult to shift into reverse, put the transmission in neutral, release the clutch pedal momentarily and then try again.
- When towing a trailer, in order to maintain engine braking efficiency, do not use the fifth gear.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Be careful when downshifting on a slippery surface. Abrupt shifting could cause the vehicle to spin or skid.

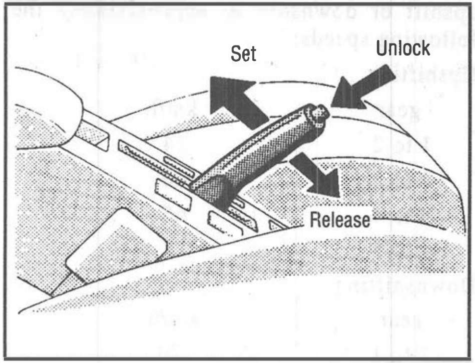
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

NOTICE:

Make sure the vehicle is completely stopped before shifting into reverse.

Important: The maximum allowable speeds given in this section are those recommended by Holden. The maximum driving speed is governed by State Law.

Parking brake



To set: Pull up the lever.

To release: Pull up slightly, press the thumb button, and lower.

Before leaving your vehicle, firmly apply the parking brake. For better holding power, first depress the brake pedal and hold it while setting the parking brake.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Before driving, be sure the parking brake is fully released and the parking brake reminder light is off.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Part 1
OPERATION OF INSTRUMENTS AND CONTROLS —

Chapter 1-7
Car audio, Heater and Air conditioning system

- Car audio operating tips
- AM•FM radio/cassette player with clock
  - 2 speaker system
- AM•FM radio/cassette player
  - 4 speaker system
- Heater/air conditioner controls
- Vents

Car audio operating tips
Radio

You can listen to the car audio when the ignition key is at "ON" or "ACC". However, if the engine is not running, the key must be in the "ACC" position.

Antenna

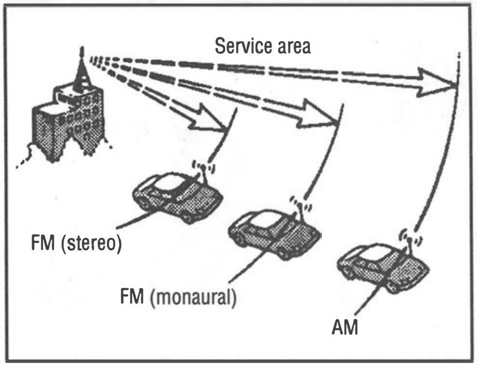
Adjust the length of your antenna for best reception. Usually a short length is best in large cities and a fully extended antenna is best for distant reception.

NOTICE:

To prevent damage to the antenna, make sure it is retracted before running your vehicle through an automatic car wash.

Radio reception

A vehicle is not an ideal place to listen to a radio. Because it moves, reception conditions are constantly changing. Buildings, terrain, signal distance and noise from other vehicles are all working against good reception. Some conditions of FM may appear to be problems when they are not. The following characteristics are completely normal for a given reception area and they do not indicate any problem with the radio itself.



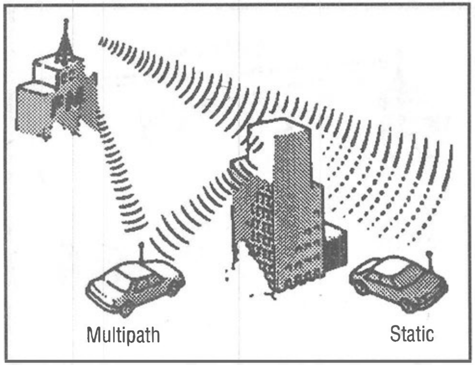
- **Fading and Drifting:** FM range is limited to about 40 kilometres, except for some high power stations.

  If a vehicle is moving away from the desired station's transmitter, the signal will tend to fade and/or drift. This is a more remarkable phenomenon than with AM and is accompanied by distortion.

  Fading and drifting can be minimized to a certain degree by careful attention to fine tuning, or you should retune the radio to a stronger signal.

continued overleaf

Radio reception — continued



- **Static and Fluttering:** When the line- of-sight link between a transmitter and vehicle is blocked by large buildings or the like, the radio sound may be accompanied with static or fluttering because of the characteristic of FM. In a similar effect, a fluttering noise is sometimes heard when driving along a tree-lined road.

  This static and fluttering can be reduced by adjusting the tone control for greater bass response until the disturbance has passed.

- **Multipath:** Because of the reflecting characteristics of FM, direct and reflected signals may reach the antenna at the same time (multipath) and cancel each other out. As a vehicle moves through these electronic dead spots, the listener may hear a momentary flutter or loss of reception.
- **Station swapping:** When two FM stations are close to each other and an electronic dead spot, such as static or multipath area, interrupts the original signal, sometimes the stronger second signal will be selected automatically until the original one returns. This swapping can also occur as you drive away from the selected station and approach another station of a stronger signal.

Cassette tape player

Use only cassette tapes of good quality, having no damage. Avoid using tapes with a total playing time longer than 90 minutes.

Using damaged tapes will cause trouble with the tape player. Longer tapes are not recommended because of their thinness.

Be sure that the tape is not slack and that the label is firmly stuck on the case before insertion.

Have the tape firmly wound around the tape spools by turning the spools with a pencil or the like.

Be careful not to touch the exposed tape surface.

When not in use, take the cassette out of the player, put it back into its case and store it away from dust, magnets and direct sunlight.

Leaving the cassettes on the dashboard in the sun could result in damaged tapes.

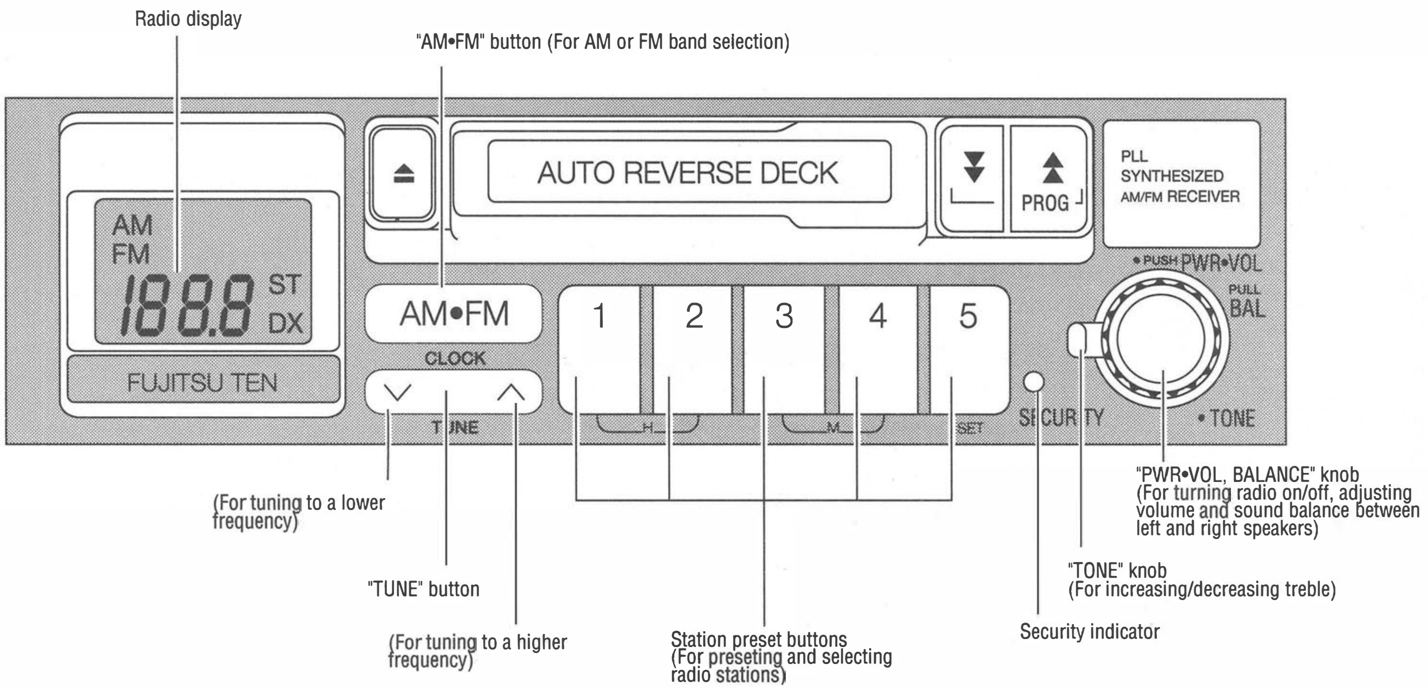
Keep the playback head, capstan and pinch roller clean.

Remove tape coating residue accumulated on the head, capstan and pinch roller once or twice a month. Use a special head cleaning cassette, available from most cassette retailers.

NOTICE:

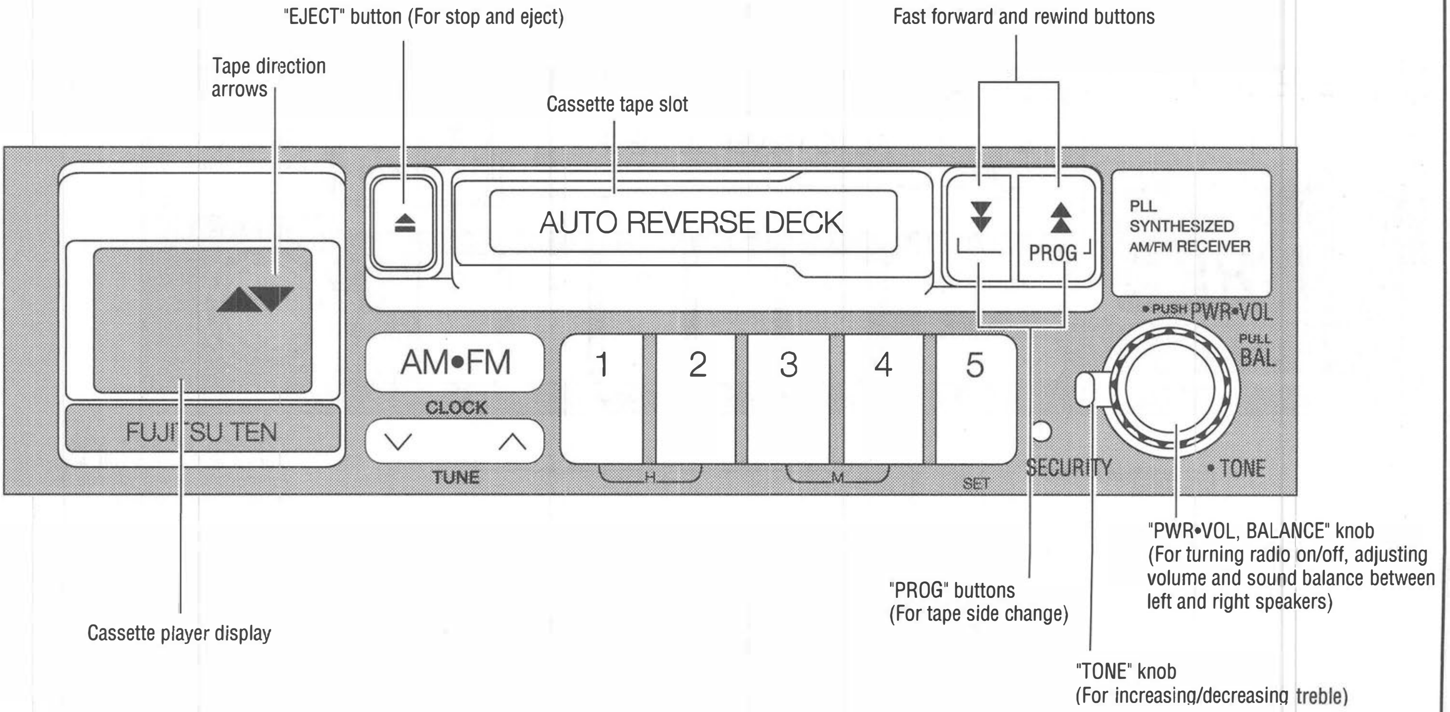
Do not oil any part of the tape player and do not insert metal goods or a magnet into the slot, or the tape player may be damaged.

Radio


Radio display
"AM•FM" button (For AM or FM band selection)
AM
FM
188.8
ST
DX
FUJITSU TEN
AUTO REVERSE DECK
PROG
PLL
SYNTHESIZED
AM/FM RECEIVER
• PUSH PWR•VOL
PULL
BAL
AM•FM
CLOCK
TUNE
1
2
3
4
5
H
M
SET
SECURITY
• TONE
(For tuning to a lower frequency)
"TUNE" button
(For tuning to a higher frequency)
Station preset buttons (For preseting and selecting radio stations)
Security indicator
"TONE" knob (For increasing/decreasing treble)
"PWR•VOL, BALANCE" knob (For turning radio on/off, adjusting volume and sound balance between left and right speakers)

AM•FM radio/cassette player with clock — 2 speaker system (SLX models)

Cassette player


"EJECT" button (For stop and eject)
Fast forward and rewind buttons
Tape direction arrows
Cassette tape slot
AUTO REVERSE DECK
PROG
PLL SYNTHESIZED AM/FM RECEIVER
PUSH PWR•VOL
PULL BAL
AM•FM
CLOCK
TUNE
1
2
3
4
5
H
M
SET
SECURITY
TONE
FUJITSU TEN
"PWR•VOL, BALANCE" knob (For turning radio on/off, adjusting volume and sound balance between left and right speakers)
"PROG" buttons (For tape side change)
"TONE" knob (For increasing/decreasing treble)
Cassette player display

Apollo SLX models are equipped with an AM•FM radio/cassette player, which also incorporates a digital clock. The following outlines radio, cassette and clock operating instructions. (For cassette player and clock operating instructions, see “Listening to the cassette tape” page 50 and “Clock resetting procedure”, page 51.)

Listening to the radio

1. Push the “PWR•VOL” knob to turn the radio on.

2. Turn the “PWR•VOL” knob to adjust the volume.

3. Tune in to the desired station. (See “Selecting a station” and “Presetting a station”, this page.)

The radio will change automatically to stereo reception when a FM stereo broadcast is being received. At the same time, the stereo indicator “ST” will appear on the display.

4. Adjust the tone and sound balance. (See “Adjusting the tone” and “Adjusting the sound balance”, page 50.)

5. To turn the radio off, push the “PWR•VOL” knob.

Radio display

The clock will display unless a station or AM•FM band is being selected, at which time the station frequency will display. When selection is complete, the clock will resume display. To confirm which station is being received, press the "AM•FM" button for 2 seconds or more, or until a beep sounds, and the frequency will be displayed for approximately 5 seconds.

Selecting a station

1. Select the desired "AM•FM" band by pressing the “AM•FM” button. The display will indicate the band selected.

2. Tune in to the desired station using one of the following methods. The frequency will appear on the display.

(a) Preset tuning: Use for tuning in to a desired preset station. (See “Presetting a station”, this page.)

Push the station preset button which has been preset to the desired station. The radio will tune in to the station and the button number will appear on the display.

(b) Seek tuning: Use for automatic station search and stop.

Press the “TUNE ∨ ” (seek tuning down) button for 0.5 of a second or more, until a beep sounds. The radio will begin seeking down for a station of the nearest frequency and stop on reception. To select the next lowest frequency, press the button again.

Press the “TUNE ∧ ” (seek tuning up) button for 0.5 of a second or more, until a beep sounds. The radio will begin seeking up for a station of the nearest frequency and stop on reception. To select the next highest frequency, press the button again.

If the radio cannot seek out any stations in one pass because receiver signals are too weak, the radio will begin seeking again with sensitivity boosted for searching out weak stations. At this time, “DX” will appear on the display.

(c) Manual tuning: Press the “TUNE ∨ ” (manual tuning down) button. A series of short presses enables you to seek the next lowest frequency.

Press the “TUNE ∧ ” (manual tuning up) button. A series of short presses enables you to seek the next highest frequency.

Presetting a station

1. Tune in to the desired station. (See “Selecting a station”, this page.)

2. Push one of the station preset buttons and hold it until a beep sounds. This sets the station to the button and the button number will appear on the display.

continued overleaf

Each button can store one AM station and one FM station. To change the preset button to a different station, follow the same procedure.

Note: If the electrical power source (e.g., battery, fuse, etc.) is disconnected, all memories stored in the preset buttons will be cancelled. In such a case, repeat steps 1 and 2 to restore preset stations.

Adjusting the tone

The tone is adjusted by turning the "TONE" knob. To increase treble, turn the knob clockwise. To decrease treble, turn the knob counter clockwise.

Adjusting the sound balance

To balance the sound between the left and right speakers, pull out the "PWR•VOL" knob and turn.

Listening to the cassette tape

1. Insert the cassette into the slot, with the tape side to the right and lightly push it in. The cassette player will accept the cassette and automatically load the tape to play.

The tape will begin to play, regardless of "PWR•VOL" knob position. If the radio is on when inserting the cassette, the radio will automatically turn off.

2. Turn the "PWR•VOL" knob to adjust the volume.

3. Select your program . (See "Selecting a program", this page.)

4. Adjust the tone and sound balance. (See "Adjusting the tone" and "Adjusting the sound balance", this page.)

5. To turn the player off, push the "⏏" button and the cassette will automatically eject. As this is done, the player will turn off and if the radio was on when the cassette was inserted, the radio will automatically turn on again.

Selecting a program

The program selector function allows the selection of programs on either side of the tape when it is playing.

1. Push both the "PROG" buttons simultaneously to change tape direction and the playing side. The "Tape direction indicators" on the display will indicate tape direction.

The player will automatically reverse directions at the end of the tape to play the other side.

2. Fast forward or rewind the tape as follows.

(a) Fast forward

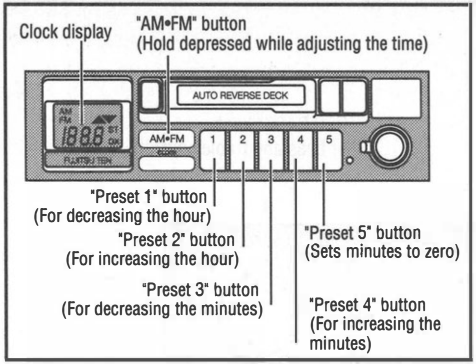
Push in the button which indicates the same direction as the displayed "Tape direction indicator". When the end of the tape is reached, fast forward is cancelled and tape play resumes.

To stop fast forward, lightly push the other button. Tape play will resume.

(b) Rewind

Push in the button which indicates the opposite direction as the displayed "Tape direction indicator". When the end of the tape is reached, rewind is cancelled and tape play resumes.

To stop rewind, lightly push the other button. Tape play will resume.


Clock display
"AM•FM" button
(Hold depressed while adjusting the time)
AUTO REVERSE DECK
AM•FM
1
2
3
4
5
"Preset 1" button
(For decreasing the hour)
"Preset 2" button
(For increasing the hour)
"Preset 3" button
(For decreasing the minutes)
"Preset 5" button
(Sets minutes to zero)
"Preset 4" button
(For increasing the minutes)

Clock reset procedure

The clock indicates time with the ignition key at the "ACC" or "ON" position only.

To reset the time, first press the "AM•FM" button and hold depressed while resetting the hour and minutes with the "Preset" buttons.

Reset the time as follows.

(a) Resetting the hour

With the "AM•FM" button depressed, press the "Preset l" button to decrease the hour, or press the "Preset 2" button to increase the hour. The display will indicate the desired selection.

(b) Resetting minutes

With the "AM•FM" button depressed, press the "Preset 3" button to decrease the minutes, or press the "Preset 4" button to increase the minutes. The display will indicate the desired selection.

(c) Resetting minutes to zero

With the "AM•FM" button depressed, press the "Preset 5" button and the minutes will return to zero (:00).

Note: The time changes in steps by each press of the "Preset" buttons. Holding the buttons depressed will change the time continuously.

Anti-theft system

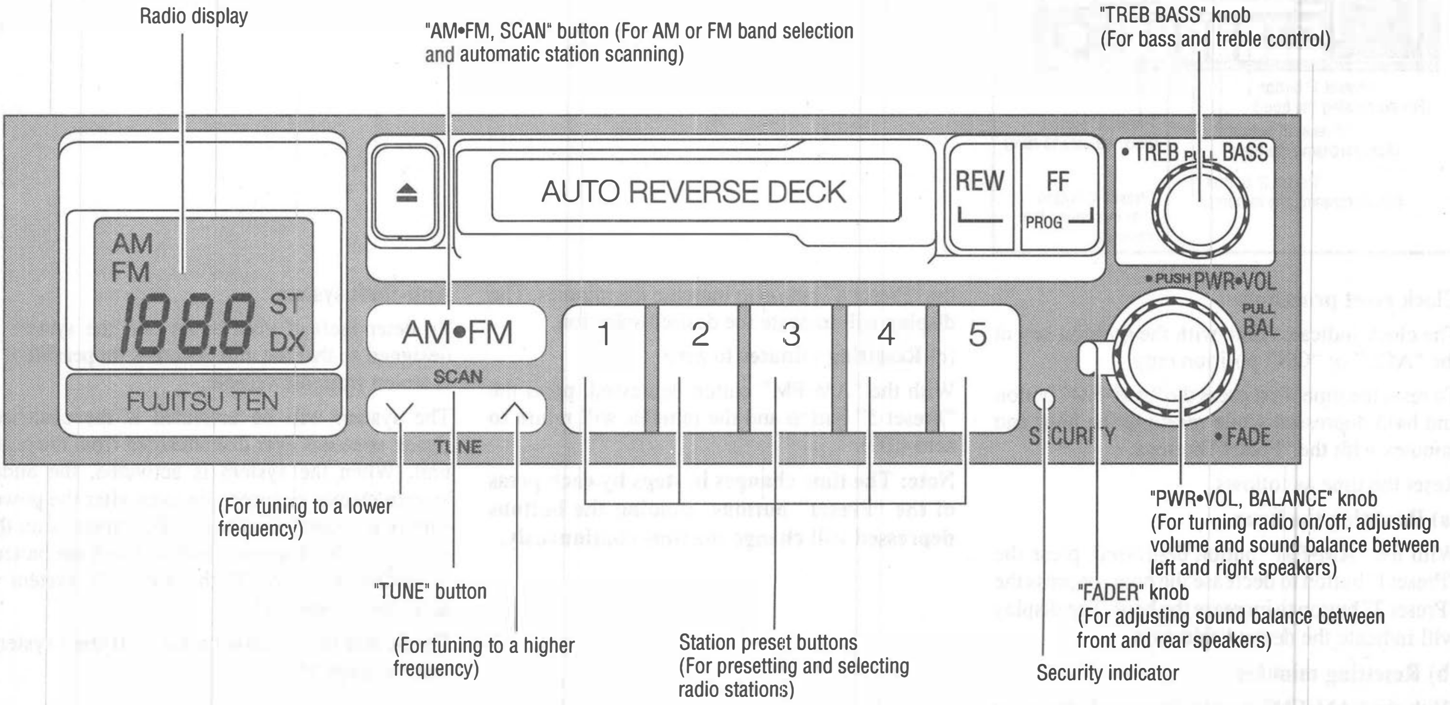
To deter theft of your audio unit the system is designed so that the unit becomes inoperable if it is stolen from the vehicle.

The system will be activated if the electrical power source is ever disconnected from the radio unit. When the system is activated, the audio system cannot be turned on even after the power supply is reconnected and "SEC" appears on the display. If this happens, such as when the battery is discharged, see, "If the anti-theft system is activated", page 58.

For further information on the Anti-theft system, refer to page 56.

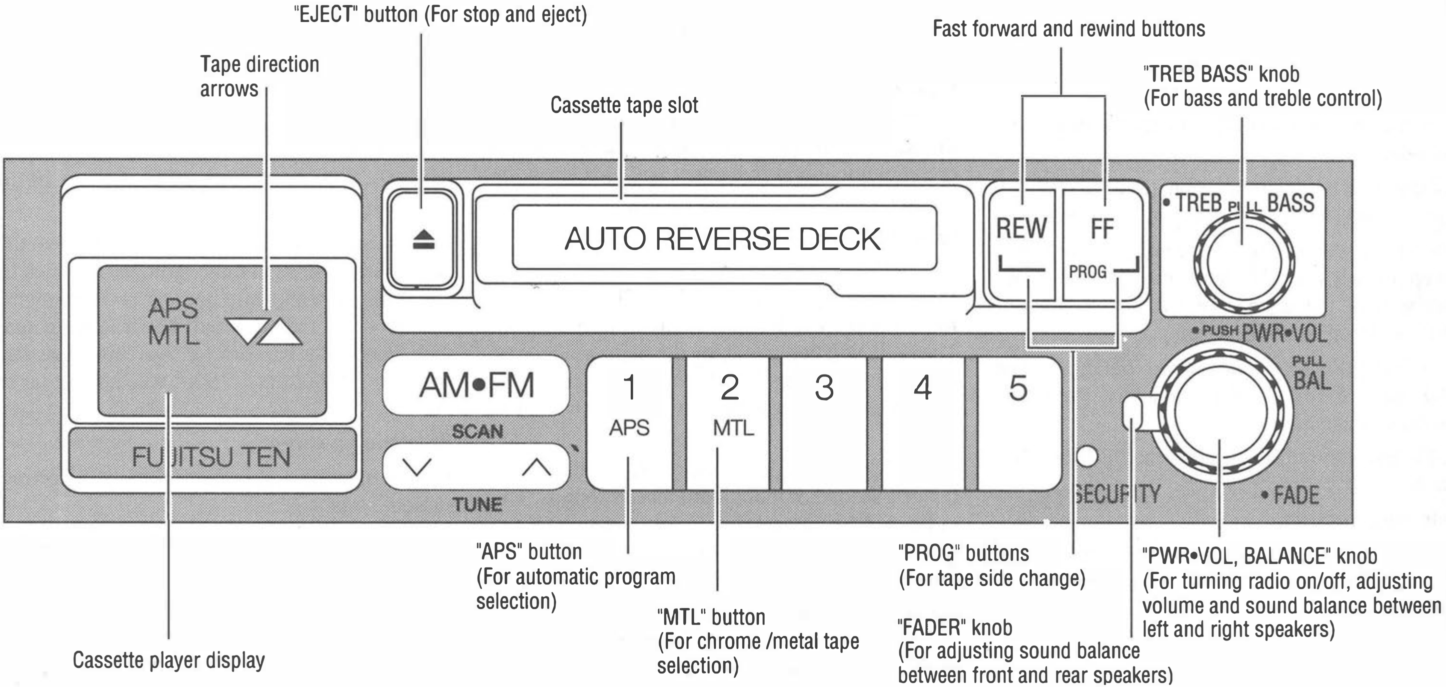
AM•FM radio/cassette player — 4 speaker system (GS model)

Radio


Radio display
"AM•FM, SCAN" button (For AM or FM band selection and automatic station scanning)
"TREB BASS" knob (For bass and treble control)
AM
FM
188.8
ST
DX
FUJITSU TEN
AUTO REVERSE DECK
REW
FF
PROG
• TREB PULL BASS
• PUSH PWR•VOL
PULL
BAL
AM•FM
SCAN
1
2
3
4
5
TUNE
SECURITY
• FADE
(For tuning to a lower frequency)
"TUNE" button
(For tuning to a higher frequency)
Station preset buttons (For presetting and selecting radio stations)
"PWR•VOL, BALANCE" knob (For turning radio on/off, adjusting volume and sound balance between left and right speakers)
"FADER" knob (For adjusting sound balance between front and rear speakers)
Security indicator

AM•FM radio/cassette player — 4 speaker system (GS model)

Cassette player


"EJECT" button (For stop and eject)
Tape direction arrows
Cassette tape slot
Fast forward and rewind buttons
"TREB BASS" knob (For bass and treble control)
APS
MTL
AUTO REVERSE DECK
REW
FF
PROG
• TREB PULL BASS
• PUSH PWR•VOL
PULL BAL
• FADE
AM•FM
SCAN
TUNE
1 APS
2 MTL
3
4
5
SECURITY
FUJITSU TEN
"APS" button (For automatic program selection)
"MTL" button (For chrome /metal tape selection)
"PROG" buttons (For tape side change)
"FADER" knob (For adjusting sound balance between front and rear speakers)
"PWR•VOL, BALANCE" knob (For turning radio on/off, adjusting volume and sound balance between left and right speakers)
Cassette player display

Apollo GS models are equipped with an AM•FM radio/cassette player which incorporates a 4 speaker system. The following outlines radio and cassette player operating instructions.

Listening to the radio

1. Push the "PWR•VOL" knob to turn the radio on.

2. Turn the "PWR•VOL" knob to adjust the volume.

3. Tune in to the desired station. (See "Selecting a station" and "Presetting a station", this page.)

The radio will change automatically to stereo reception when a FM stereo broadcast is being received. At the same time, the stereo indicator "ST" will appear on the display.

4. Adjust the tone and sound balance. (See "Adjusting the tone" and "Adjusting the sound balance", page 55)

5. To turn the radio off, push the "PWR•VOL" knob.

Selecting a station

1. Select the desired AM•FM band by pressing the "AM•FM" button. The display will indicate the band selected.

2. Tune in to the desired station using one of the following methods. The selected frequency will appear on the display.

(a) Preset tuning: Use for tuning in to a desired preset station. (See "Presetting a station", this page.)

Push the station preset button which has been preset to the desired station. The radio will tune in to the selected station and at the same time the button number and frequency will appear on the display.

(b) Seek tuning: Use for automatic station search and stop.

Press the " ∨ " side of the "TUNE" button for 0.5 of a second or more, until a beep sounds. The radio will begin seeking down for a station of the nearest frequency and stop on reception. To select the next lowest frequency, press the button again.

Press the " ∧" side of the "TUNE" button for 0.5 of a second or more, until a beep sounds. The radio will begin seeking up for a station of the nearest frequency and stop on reception. To select the next highest frequency, press the button again.

(c) Manual tuning: Press the " ∨ " side of the "TUNE" button with a series of short presses. This enables you to manually seek the next lowest frequency.

Press the "∧" side of the "TUNE" button with a series of short presses. This enables you to manually seek the next highest frequency.

Scan

Selecting "SCAN" mode enables one station after the other to be received in a sequence upwards for approximately 5 seconds.

To scan, press the "SCAN" button and a beep will sound. When the desired station is reached, press the "SCAN" button once again and scan will stop on that station.

If selecting a station with any of the previously described methods and the radio cannot seek out any stations in one pass because receiver signals are too weak, the radio will begin seeking again with sensitivity boosted for searching out weak stations. At this time, "DX" will appear on the display.

Presetting a station

1. Tune in to the desired station. (See "Selecting a station", this page.)

2. Push one of the station preset buttons and hold it until a beep sounds. This sets the station to the button and the button number will appear on the display.

Each button can store one AM station and one FM station into memory. After presetting, just press the button to receive the station. To change the preset button to a different station, follow the same procedure.

Note: If the electrical power source (e.g., battery, fuse, etc.) is disconnected, all memories stored in the preset buttons will be cancelled. In such a case, repeat steps 1 and 2 to restore preset stations.

Adjusting the tone

Tone is adjusted by the following controls.

(a) Bass control

Pull out the "TREB BASS" knob and turn. From the pulled out position, turning the knob in a clockwise direction will increase the bass level, turning the knob in a counter clockwise direction will decrease the bass level.

(b) Treble control

Turn the "TREB BASS" knob to adjust the treble level. Turning the knob clockwise will increase treble level, turning the knob counter clockwise will decrease treble level.

Adjusting the sound balance

(a) Balance control

To balance the sound between the left and right speakers, pull out the "PWR•VOL" knob and turn.

(b) Fader control

To balance the sound between the front and rear speakers, turn the "FADER" knob. Turning the knob clockwise will increase sound level at the front, turning the knob counter clockwise will increase sound level at the rear.

Listening to the cassette tape

1. Insert the cassette into the slot, with the tape side to the right, and lightly push it in. The cassette player will accept the cassette and automatically load the tape to play.

The tape will begin to play, regardless of "PWR•VOL" knob position. If the radio is on when inserting the cassette, the radio will automatically turn off.

If the cassette is already in the slot, press the "TAPE ■ ▶ " button and play will commence.

2. When a chrome or metal tape is played, press the cassette selector button, "MTL". At this time "MTL" will appear on the display.

3. Turn the "PWR•VOL" knob to adjust the volume.

4. Select your program. (See "Selecting a program", this page.)

5. Adjust the tone and sound balance. (See "Adjusting the tone" and "Adjusting the sound balance", this page.)

6. To turn the player off, push the "⏏" button and the cassette will automatically eject. As this is done, the player will turn off and if the radio was on when the cassette was inserted, the radio will automatically turn on again.

Selecting a program

1. Push the "PROG" buttons simultaneously to change tape direction and the playing side. The tape direction indicators on the display will indicate tape direction.

The player will automatically reverse directions at the end of the tape to play the other side.

2. Select the desired program using either of the following methods.

(a) Manual program selection

Press the "FF" or "REW" buttons to either fast forward or rewind the tape. When fast forwarding or rewinding, the tape direction arrows on the display indicate tape direction. To stop fast forward or rewind, push the other button lightly.

During fast forward and rewind, the radio will play.

(b) Automatic program selection

Use for quick access to a desired program.

1. Press the "APS" button. At this time, "APS" will appear on the display.

2. To select the next program on, press the "FF" button. The player will automatically stop at the beginning of the next program and resume play.

To select the next program back, press the "REW" button. The player will automatically stop at the beginning of the next program back and resume play.

continued overleaf

During automatic program selection, the radio will play while a program is being searched.

When the tape comes to an end during automatic program selection, normal play mode will resume.

Note: Automatic program selection may not work properly if the following conditions prevail.

1. If blank portions between programs are less than 3 seconds duration.

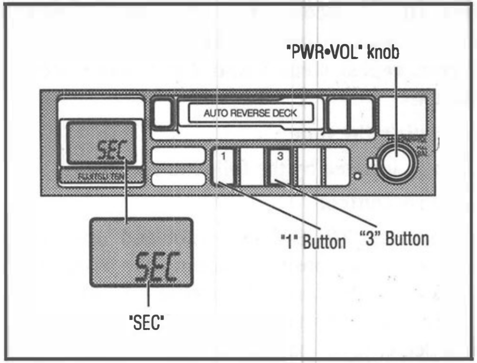
2. A tape which has programs recorded with a low sound level.

3. A tape which has programs with an unclear beginning or ending.

Anti-theft system

To deter theft of your audio unit the system is designed so that the unit becomes inoperable if it is stolen from the vehicle.

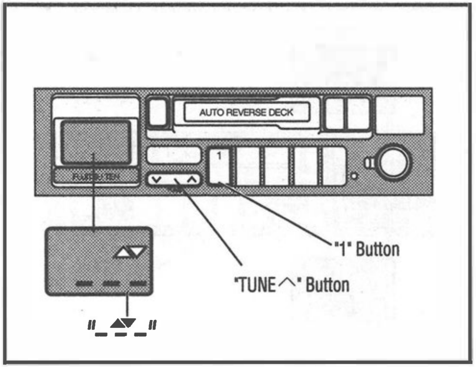
The system will be activated if the electrical power source is ever disconnected from the radio unit. When the system is activated, the audio system cannot be turned on even after the power supply is reconnected and "SEC" appears on the display. If this happens, such as when the battery is discharged, see "If the anti-theft system is activated", page 58.



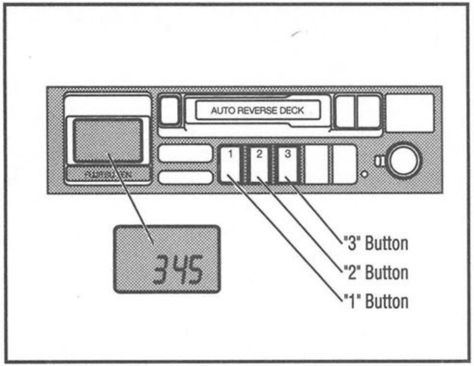
Setting the anti-theft system

1. Make sure that the radio is turned off with the ignition switch in "ACC".

2. While holding the "1" and "3" buttons in, push and hold the "PWR•VOL" knob in until "SEC" appears on the display.

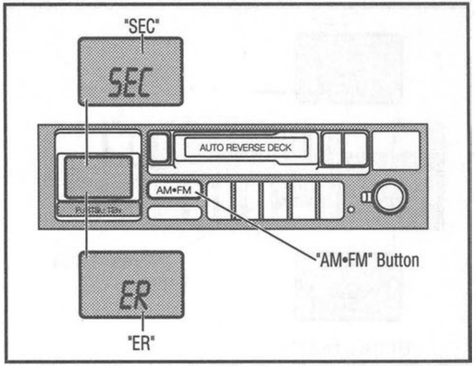


3. Press the “1” button while holding the “TUNE ∧ ” button in. At this time the tape operation indicator “– –▼▲” will appear on the display.



4. Input your identification number by pressing the “1”, “2” and “3” buttons repeatedly. Use the “1” button for the first digit, the “2” button for the second digit and the “3” for the last digit. For example, if your number is 345, press the “1” button 4 times, the “2” button 5 times and the “3” button 6 times. If the display returns to “– –▲▼”, try inputting the number again.

The identification number is self-determined and it is recommended that your number be associated with something easy to remember. In case you are unsure of the number, write it in a notebook you normally carry. Do not leave it in your vehicle.

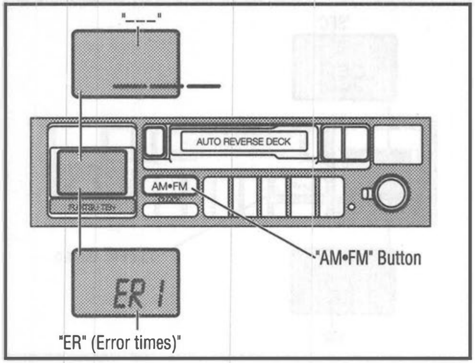


5. With your identification number appearing on the display, press the “AM•FM” button and hold it until “SEC” appears on the display. “SEC” will go off to indicate the system is set. If invalid buttons have been used, “ER” will appear on the display before “SEC” appears. Try again from step 3.

Once the system is set, the security indicator will flash with the key in the “LOCK” position and “SEC” will appear on the display each time the key is turned to the “ACC” position.

To change the identification number for some reason, cancel the system (see “Cancelling the anti-theft system”, page 58) and set it again with a new number.

continued overleaf



Cancelling the anti-theft system

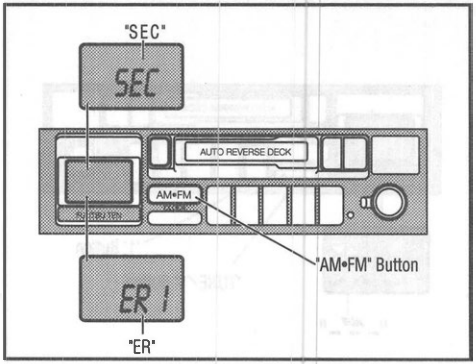
1. Follow steps 1 to 4 described in "Setting the anti-theft system".

2. With your identification number appearing on the display, press the "AM•FM" button and hold it until "---" appears on the display. "---" will go off to indicate the system is cancelled. If invalid buttons have been used, "ER" will appear on the display and "SEC" appears. Try again from step 3 in "Setting the anti-theft system".

The figure displayed when "ER" appears indicates how many errors have been made. You may make up to four errors, but no more.

Notice:

A fifth error will activate the anti-theft system, the security indicator will remain lit and the audio system will be completely inoperable. Under these circumstances, reset the anti-theft system (See, "If the anti-theft system is activated"). If the system cannot be reactivated, take the vehicle with the activated anti-theft system to your Holden dealer to reactivate the audio system. Be warned that rectification may involve removal of the audio, for which you may be charged.



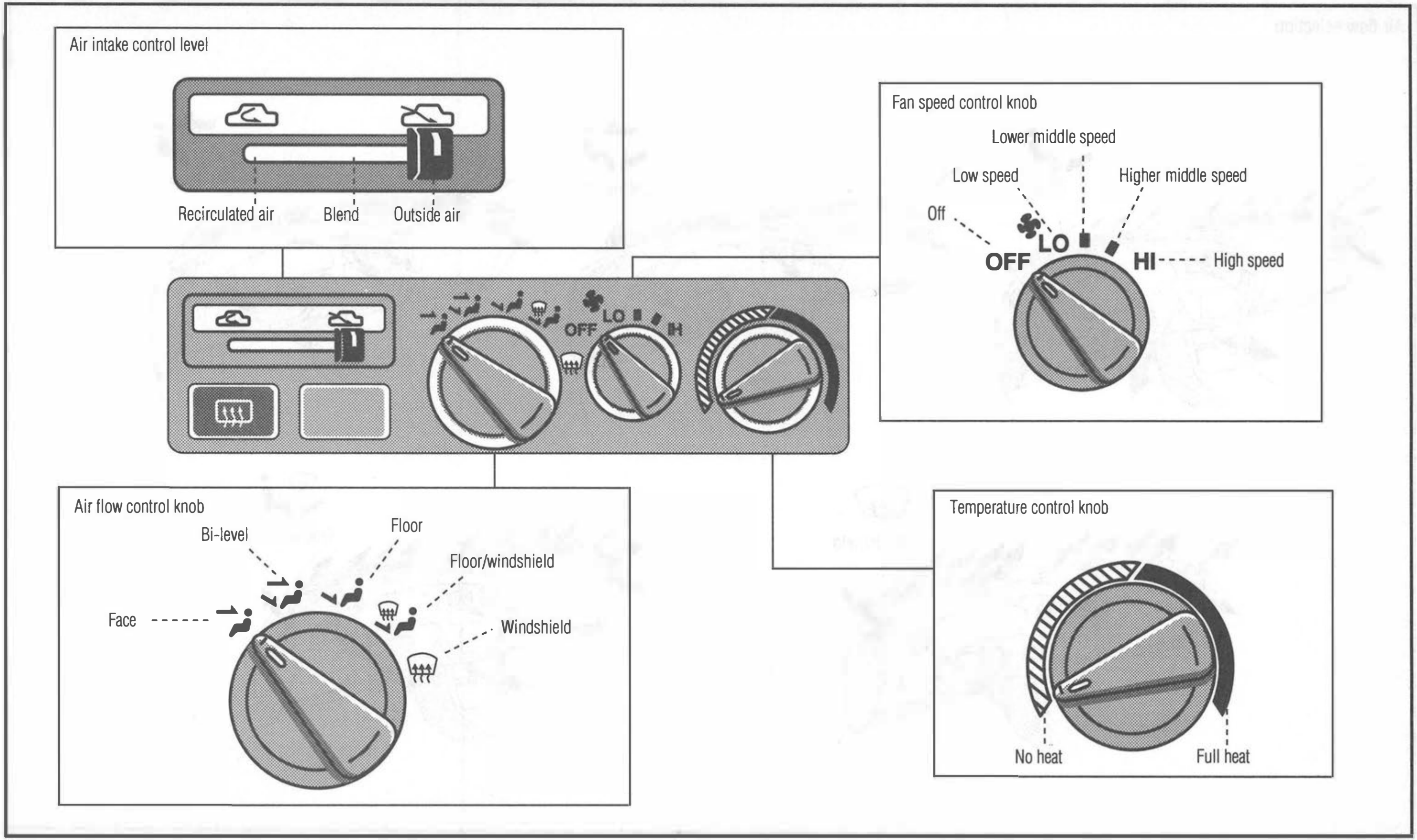
If the anti-theft system is activated

The audio system made inoperable by the activated anti-theft system will be operable if the correct identification number is entered.

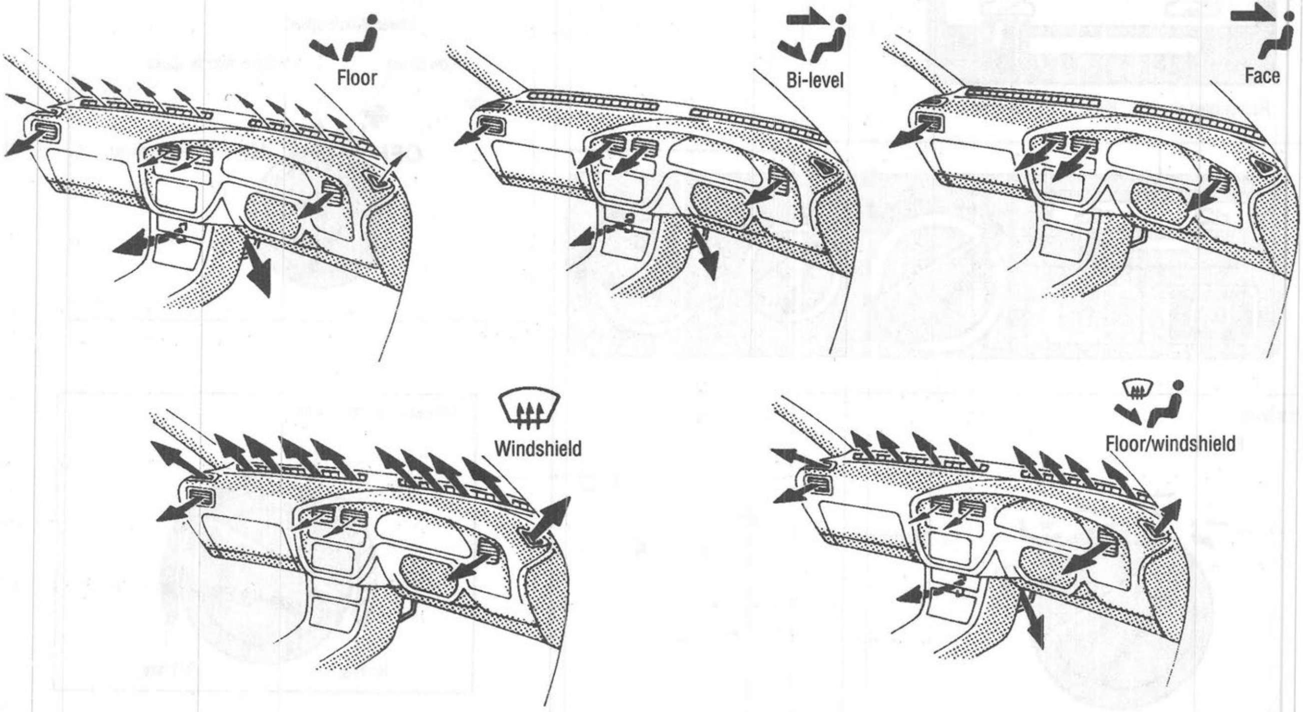
1. Follow steps 3 and 4 described in "Setting the anti-theft system".

2. With your identification number appearing on the display, press the "AM•FM" button and hold it until "SEC" appears on the display. "SEC" will go off to indicate that the system is reset and operable. If invalid buttons have been used, "ER" will appear on the display before "SEC" appears. If this occurs, try again from the beginning.

Heater controls


Air intake control level
Recirculated air
Blend
Outside air
Fan speed control knob
Lower middle speed
Low speed
Higher middle speed
Off
OFF
LO
HI
High speed
Air flow control knob
Bi-level
Floor
Floor/windshield
Face
Windshield
Temperature control knob
No heat
Full heat

Air flow selection


Floor

Bi-level

Face

Windshield

Floor/windshield

(A) Controls and functions

The temperature control knob is used to turn on and off the heater and adjust the temperature of the heated air.

Turn the knob toward the FULL HEATING position for higher temperature. Turning the knob to the NO HEAT position turns off the heater.

The air intake control lever is used to select intake air, either outside air or recirculated air.

With the lever in the OUTSIDE AIR position, the system will take fresh outside air into the unit. For recirculated air, move the lever to the RECIRCULATED AIR position. The BLEND position gives air blended from both.

The air flow control knob is used to select the outlets that air is delivered from.

See "(e) Air flow selection" for detailed information.

The fan speed control knob is used to turn on and off the fan and select the fan speed.

The higher the fan speed setting, the more air is delivered. Turning the knob to the "OFF" position turns off the fan.

(B) Heating

1. Turn the temperature control knob anywhere except the NO HEAT position.

If heated air is desired at face level, turn the knob to about the middle position.

2. Move the air intake control lever to the OUTSIDE AIR position.

If quick circulation of heated air is desired, move the lever to the BLEND or the RECIRCULATED AIR position.

For normal use, it is best to keep the lever in the OUTSIDE AIR position. Otherwise the windows will fog up more easily.

3. Turn the air flow control knob to the FLOOR position.

If heated air is desired at face level, turn the knob to the BI-LEVEL position.

If the windshield fogs up easily, turn the knob to the FLOOR/WINDSHIELD position.

For detailed information on air flow control including other settings, see "(e) Air flow selection".

4. Turn the fan speed control knob anywhere except the "OFF" position.

(c) Ventilation

1. Turn the temperature control knob to the NO HEAT position.

2. Move the air intake control lever to the OUTSIDE AIR position.

3. Turn the air flow control knob to the FACE position.

For detailed information on air flow control including other settings, see "(e) Air flow selection".

4. Turn the fan speed control knob anywhere except the "OFF" position.

(d) Windshield defogging and defrosting

1. Turn the temperature control knob to the FULL HEATING position.

2. Move the air intake control lever to the OUTSIDE AIR position.

3. Turn the air flow control knob to the WINDSHIELD position.

For detailed information on air flow control, see "(e) Air flow selection".

4. Turn the fan speed control knob to the "HI" position.

continued overleaf

(e) Air flow selection

FACE position - This position directs the air flow to face level.

BI-LEVEL position - This position directs the air flow to face level and the floor. Except in ventilation, the air to the floor is slightly warmer than that to face level.

FLOOR position - This position directs the air flow mostly to the floor and face level. During heating, heated air is delivered to the floor and unheated air is delivered to face level.

FLOOR/WINDSHIELD position - This position directs the air flow mostly to the windshield, front side windows and face level. During heating, heated air is delivered to the floor and windshield and unheated air is delivered to face level.

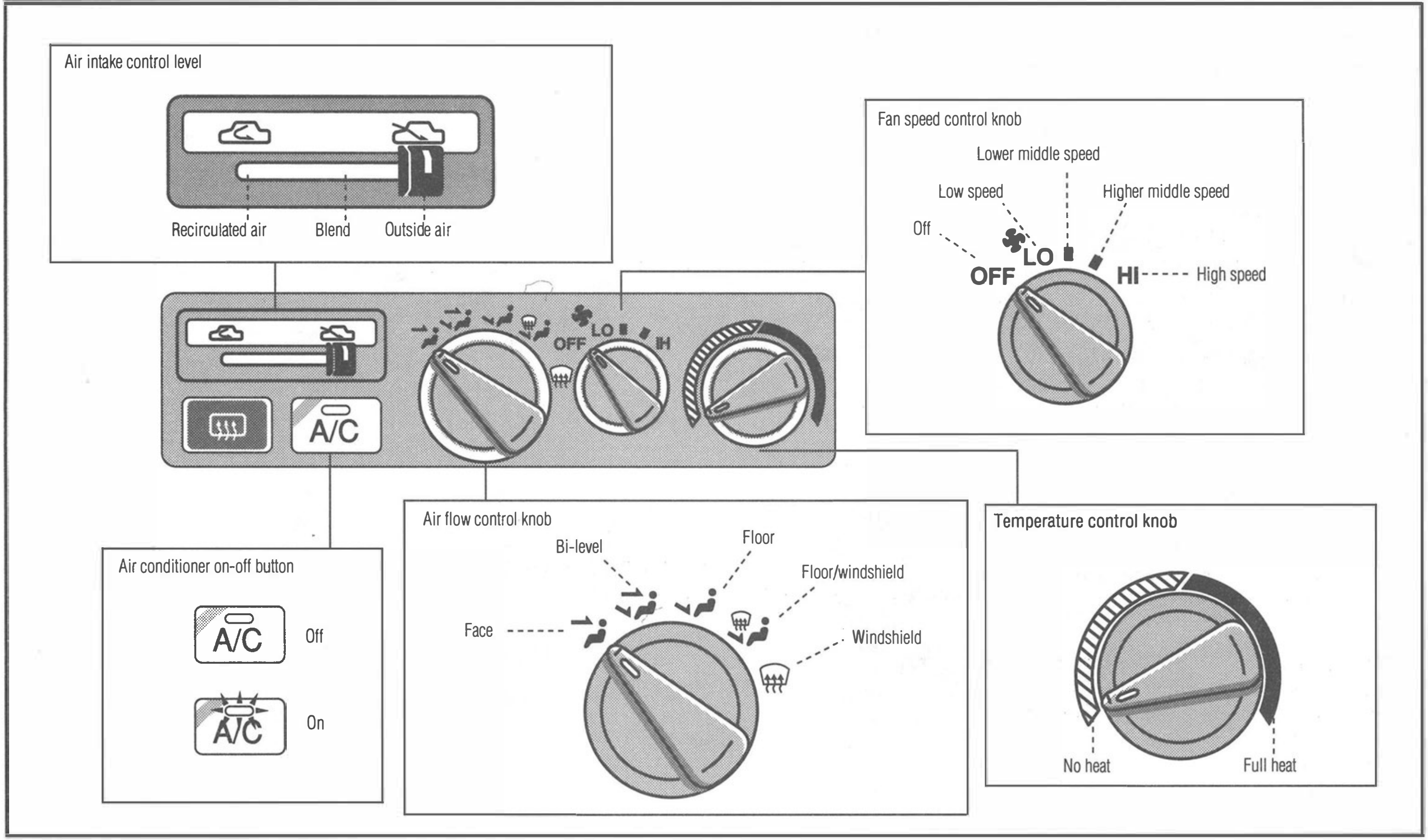
WINDSHIELD position - This position directs the air flow mostly to the windshield, front side windows and face level. During heating, heated air is delivered to the windshield and front side windows and unheated air is delivered to face level.

Do not use the WINDSHIELD position during cooling operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up blocking your vision.

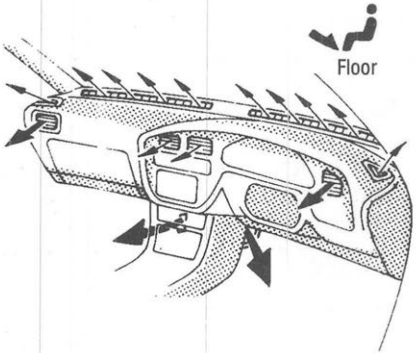
(f) Operating tips

- Be sure the air inlet grilles in front of the windshield are not blocked by leaves or other obstructions.
- If air flow control is not satisfactory, check the dashboard vents. (See “Vents” at end of this chapter).
- When driving on dusty roads, close all windows. If dust thrown up by the vehicle is still drawn into the vehicle after closing the windows, it is recommended that the air intake control lever be set to the OUTSIDE AIR position and the fan speed control knob placed anywhere except the “OFF” position.
- If following another vehicle on a dusty road, or driving in windy and dusty conditions, it is recommended that the air intake control lever be temporarily set to the RECIRCULATED AIR position, which will close off the outside passage and prevent outside air and dust from entering the vehicle interior.

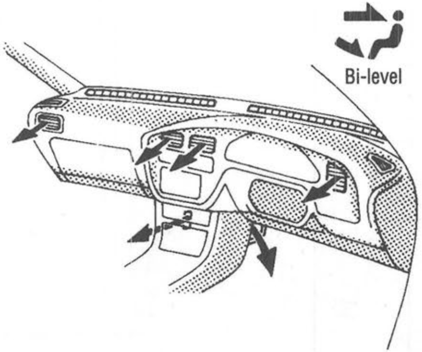
Air conditioner controls


Air intake control level
Recirculated air
Blend
Outside air
Fan speed control knob
Lower middle speed
Low speed
Higher middle speed
Off
OFF
LO
HI
High speed
A/C
Air conditioner on-off button
A/C
Off
A/C
On
Air flow control knob
Bi-level
Floor
Floor/windshield
Face
Windshield
Temperature control knob
No heat
Full heat

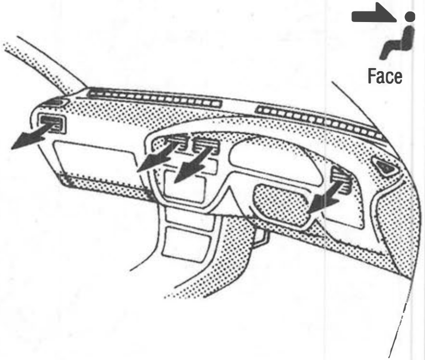
Air flow selection



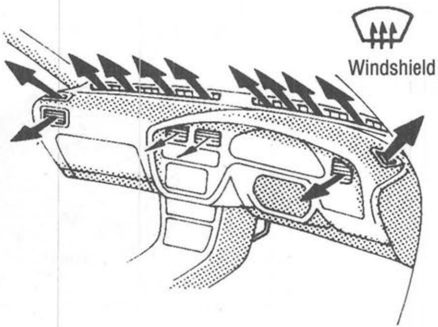
Floor



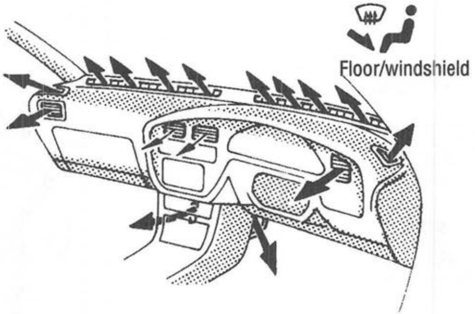
Bi-level



Face



Windshield



Floor/windshield

(a) Controls and functions

The temperature control knob is used to adjust the temperature of the delivered air.

Turn the knob toward the HIGH position for higher temperature and toward the LOW position for lower temperature.

The air intake control lever is used to select intake air, either outside air or recirculated air.

With the lever in the OUTSIDE AIR position, the system will take fresh outside air into the unit. For recirculated air, move the lever to the RECIRCULATED AIR position. The BLEND position gives air blended from both.

The air flow control knob is used to select the outlets that air is delivered from.

See "(f) Air flow selection" for detailed information.

The fan speed control knob is used to turn on and off the fan and select the fan speed.

The higher the fan speed setting, the more air is delivered. Turning the knob to the "OFF" position turns off the fan.

The air conditioner on-off button is used to turn on and off the air conditioner.

With the button pressed in, the air conditioner turns on. Pressing the button once again will turn the air conditioner off.

If the indicator light flashes, contact your Holden dealer as soon as possible. There may be a slippage of the drive belt or a problem in the compressor. If this happens, the air conditioner is automatically turned off to protect the air conditioner system.

(b) Heating

1. Turn the temperature control knob anywhere except the LOW position.

When dehumidified heating is desired, turn the knob between the HIGH and middle positions.

If heated air is desired at face level, turn the knob around the middle.

2. Move the air intake control lever to the OUTSIDE AIR position.

If quick circulation of heated air is desired, move the lever to the BLEND or the RECIRCULATED AIR position.

For normal use, it is best to keep the lever in the OUTSIDE AIR position. Otherwise the windows will fog up more easily.

3. Turn the air flow control knob to the FLOOR position.

If heated air is desired at face level, turn the knob to the BI-LEVEL position.

If the windshield fogs us easily, turn the knob to the FLOOR/WINDSHIELD position.

For detailed information on air flow control including other settings, see "(f) Air flow selection".

4. Turn the fan speed control knob anywhere except the "OFF" position.

5. If dehumidified heating is desired, press in the air conditioner on-off button.

continued overleaf

(c) Cooling

1. Turn the temperature control knob anywhere between the middle and LOW positions.

If warmer air is desired at floor level for bi-level operation, turn the knob around the middle.

2. Move the air intake control lever to the OUTSIDE AIR position.

If quick circulation of cooled air is desired, move the lever to the BLEND or RECIRCULATED AIR position.

For normal use, it is best to keep the lever in the OUTSIDE AIR position.

3. Turn the air flow control knob to the FACE position.

If warmer air is desired at floor level for bi-level operation, turn the knob to the BI-LEVEL position.

For detailed information on air flow control including other settings, see "(f) Air flow selection".

4. Turn the fan speed control knob anywhere except the "OFF" position.

5. Press in the air conditioner on-off button.

(d) Ventilation

1. Turn the temperature control knob to the LOW position.

2. Move the air intake control lever to the OUTSIDE AIR position.

3. Turn the air flow control knob to the FACE position.

For detailed information on air flow control including other settings, see "(f) Air flow selection".

4. Turn the fan speed control knob anywhere except the "OFF" position.

5. Leave the air conditioner on-off button in the "OFF" position.

(e) Windshield defogging and defrosting

To remove interior fog on the windshield;

1. Turn the temperature control knob to any position.

2. Move the air intake control lever to the OUTSIDE AIR position.

3. Turn the air flow control knob to the WINDSHIELD position.

For detailed information on air flow control, see "(f) Air flow selection".

4. Turn the fan speed control knob anywhere except the "OFF" position.

5. Press in the air conditioner on-off button.

To remove frost or exterior fog on the windshield:

1. Turn the temperature control knob to the HIGH position.

2. Move the air intake control lever to the OUTSIDE AIR position.

3. Turn the air flow control knob to the WINDSHIELD position.

For detailed information on air flow control, see "(f) Air flow selection".

4. Turn the fan speed control knob to the "HI" position.

5. Leave the air conditioner on-off button in the "OFF" position.

(f) Air flow selection

FACE position - This position directs the air flow to face level.

BI-LEVEL position - This position directs the air flow to face level and the floor. Except in ventilation, the air to the floor is slightly warmer than that to the face level.

FLOOR position - This position directs the air mostly to the floor and face level. During heating, heated air is delivered to the floor and unheated air is delivered to face level.

FLOOR/WINDSHIELD position - This position directs the air flow to the windshield as well as the floor and face level. During heating, heated air is delivered to the floor and windshield and unheated air is delivered to face level.

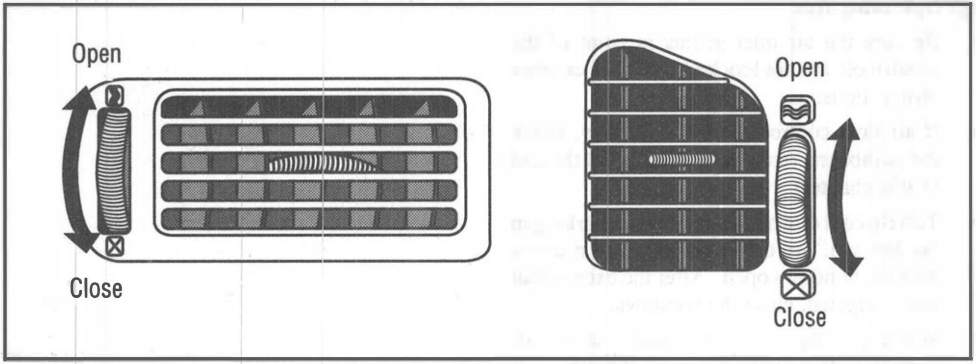
WINDSHIELD position - This position directs the air flow mostly to the windshield and front side windows and face level. During heating, heated air is delivered to the windshield and front side windows and unheated air is delivered to face level.

Do not use the WINDSHIELD button during cooling operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up blocking your vision.

(g) Operating tips

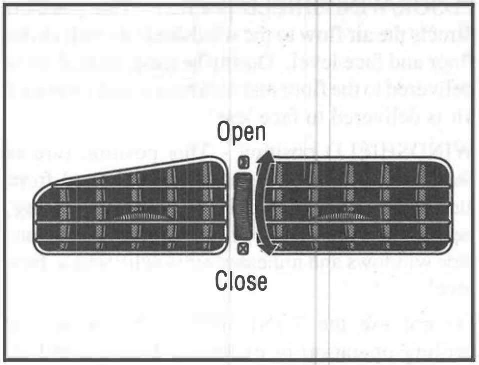
- Be sure the air inlet grilles in front of the windshield are not blocked by leaves or other obstructions.
- If air flow control is not satisfactory, check the dashboard vents. (See "Vents" at the end of this chapter).
- To help cool down the interior after parking in the hot sun, drive for the first few minutes with the windows open. After the excess heat has dissipated, close the windows.
- When driving on dusty roads, close all windows. If dust thrown up by the vehicle is still drawn into the vehicle after closing the windows, it is recommended that the air intake control lever be set to the OUTSIDE AIR position and the fan speed control knob placed anywhere except the "OFF" position..
- If following another vehicle on a dusty road, or driving in windy and dusty conditions, it is recommended that the air intake control lever be temporarily set to the RECIRCULATED AIR position, which will close off the outside passage and prevent outside air and dust from entering the vehicle interior.

Side vents


Open
Close
Open
Close

The side vents may be opened or closed as shown.

Centre vents



The centre vents may be opened or closed as shown.

Part 1

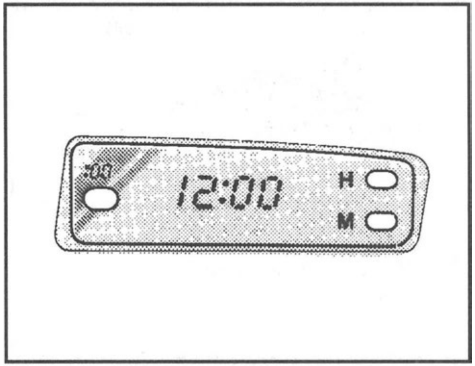
OPERATION OF INSTRUMENTS AND CONTROLS —

Chapter 1-8

Other equipment

- Clock
- Cigarette lighter and ashtray
- Glovebox
- Roof luggage carrier
- Luggage cover

Clock — GS model



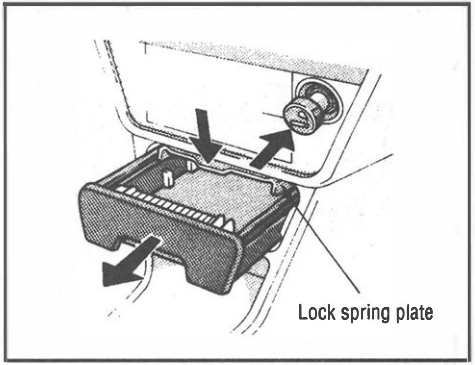
The digital clock indicates the time with the ignition key at the "ACC" or "ON" position. To reset the hour, depress the "H" button. To reset the minute, depress the "M" button. To adjust the time to a full hour, depress the "00" button.

For example, if the "00" button is depressed when the time is between 1.01 - 1:29, the time will change to 1:00. If the time is between 1:30 - 1:59, the time will change to 2:00.

When the instrument panel lights are turned on, the brightness of the time indication will be reduced.

Once the electrical power source has been disconnected from the clock, the time is automatically set to 1:00 (one o'clock).

Cigarette lighter and ashtray



To operate the cigarette lighter, press it in. When it becomes heated, it automatically pops out ready for use.

If the engine is not running, the key must be in the "ACC" position.

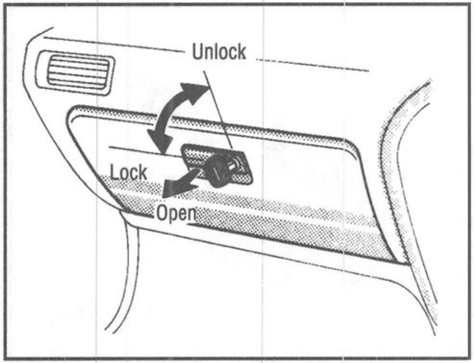
Do not hold the cigarette lighter pressed in.

When finished with your cigarette, thoroughly extinguish it in the ashtray to prevent other cigarette butts from catching fire. After using the ashtray, push it back in completely.

To remove the ashtray, press down on the lock spring plate and pull out.

Use a Holden genuine cigarette lighter or equivalent for replacement.

Glovebox



To open the glovebox door, pull the lever.

To lock the glovebox door, insert the master key and turn it clockwise.

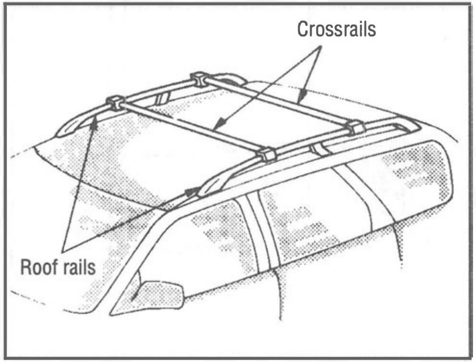
With the instrument panel lights on, the glovebox light will come on when the door is opened (GS model).

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

To reduce the chance of injury in case of an accident or a sudden stop, always keep the glovebox door closed while driving.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Roof luggage carrier (station wagon) – if equipped



To use the roof rails as a roof luggage carrier, you must fit the roof rails with two or more genuine Holden crossrails or equivalent.

Follow the manufacturer's instructions and precautions when installing the crossrails or equivalent.

NOTICE:

When you load cargo on the roof luggage carrier, observe the following precautions to prevent accidents and damaged to your vehicle:

Do not exceed 100 kg cargo weight on the roof luggage carrier.

Place cargo so that its weight is distributed evenly between the front and rear axles.

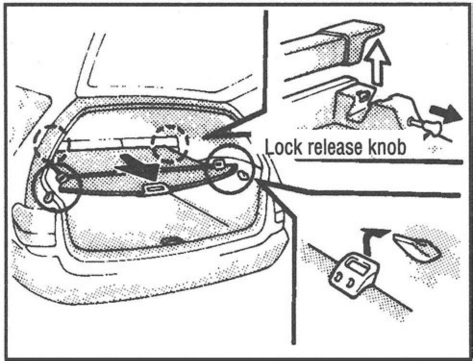
If loading long or wide cargo, never exceed vehicle overall lenght or width. (See "Dimensions" in Part 8 for information on your vehicle overall length and width).

Before driving, make sure the cargo is securely fastened on the roof luggage carrier.

Avoid sudden starts, sharp turns or sudden braking.

If driving for a long distance on rough roads, or at high speeds, stop the vehicle now and then during the trip to make sure the cargo remains secure.

Luggage cover (Station wagon) – if equipped



To use the luggage cover, pull it out of the retractor and hook it to the anchors.

To remove the luggage cover, pull the lock release knobs and lift up the luggage cover.

CAUTION:

The luggage cover is not a cargo restraint device. For information on luggage stowage, refer to "Luggage stowage precautions" in Part 2.

Part 2
INFORMATION BEFORE DRIVING YOUR HOLDEN —

- Break-in period
- Fuel
- Catalytic converter
- Engine exhaust cautions
- Facts about engine oil consumption
- Brake system
- Brake pad wear indicators
- Luggage stowage precautions
- Your Holden's identification

Break-in period

Drive gently and avoid high speeds.

Your vehicle does not need an elaborate break-in. But following a few simple tips for the first 1000 km can add to the future economy and long life of your vehicle:

- Do not drive over 100 km/h.
- Maintain engine speed between 2000 and 4000 rpm.
- Avoid full-throttle starts.
- If possible, avoid hard stops during the first 300 km.
- Do not drive slowly with the transmission in a high gear.
- Do not drive for a long time at any single speed, either fast or slow.
- Do not tow a trailer during the first 800 km.

Fuel

Selecting the proper fuel is essential to satisfactory performance of the engine.

Engine damage caused by use of improper fuels is not covered under Holden's new vehicle warranty.

Fuel type

Use only unleaded petrol.

NOTICE:

Do not use leaded petrol in your vehicle. Use of leaded petrol will cause the catalytic converter to lose its effectiveness and the emission control system to function improperly. Also, this can increase maintenance costs.

Octane number

Use unleaded petrol with an octane number (Research Octane Number) of 91 or higher.

Use of a fuel with an octane number lower than stated will cause persistent heavy knocking. If severe, this will lead to engine damage.

Fuel tank capacity

70 litres.

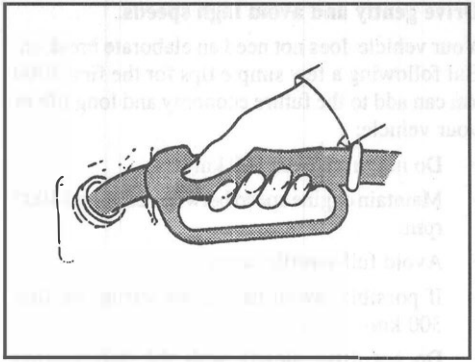
continued overleaf

If your engine knocks

If you detect heavy knocking even when using the recommended fuel, or if you hear persistent knocking while holding a steady speed on level roads, consult your Holden dealer.

However, now and then, you may notice light knocking for a short time while accelerating or driving up hills. This is no cause for concern.

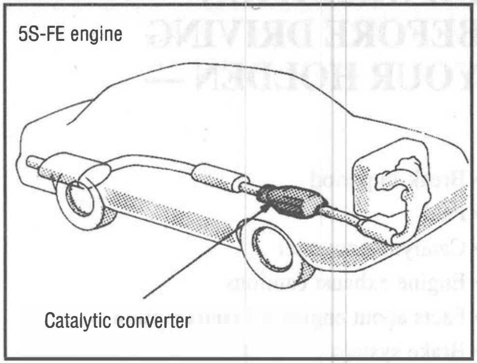
Filling with unleaded petrol

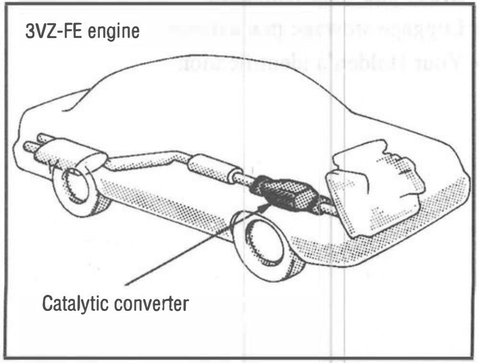


Before allowing the petrol to flow, push the nozzle hard enough to open the flap in the filler tube and continue pushing until the nozzle will go no further.

Service stations sell both leaded and unleaded petrol. Leaded petrol is dispensed through nozzles larger than unleaded ones. To protect your car from being filled with leaded petrol it has a filler neck that is only wide enough to accept the unleaded petrol dispensing nozzle. As an added precaution, the filler tube contains a flap that will not open when a leaded petrol nozzle is inserted. Thus, leaded petrol will spill out of the filler instead of going into the fuel tank.

Catalytic converter





The catalytic converter is an emission control device installed in the exhaust system.

It looks somewhat like a muffler, but its purpose is to reduce pollutants in the exhaust gas.

CAUTION:

- **Keep people and combustible materials away from the exhaust pipe while the engine is running. The exhaust gas is very hot.**
- **Do not drive, idle or park your vehicle over anything that might burn easily such as grass, leaves, paper or rags.**

NOTICE:

Incorrect fuel and large amounts of unburned fuel flowing into the converter may cause it to overheat and/or reduce its life and efficiency. Similarly, certain engine malfunctions, particularly misfiring, create an excessive heat overload on the converter. To prevent this and other damage, observe the following precautions:

- **Use only unleaded petrol.**
- **Do not drive with an extremely low fuel level; running out of fuel could cause the engine to misfire, creating an excessive load on the converter.**
- **Do not allow the engine to run at fast idle speed for more than 10 minutes or at normal idle speed for more than 20 minutes.**
- **Avoid racing the engine.**
- **Do not push-start or pull-start your vehicle.**
- **Do not turn off the ignition while the vehicle is moving.**
- **Keep your engine in good running order. Malfunctions in the engine electrical, ignition or fuel systems could cause an extremely high converter temperature.**
- **If the engine becomes difficult to start or stalls frequently, take your vehicle in for a check-up as soon as possible. Remember, your Holden dealer knows your vehicle and its catalytic converter system best.**
- **To insure that the converter and the entire emission control system operate properly, your vehicle must receive the periodic inspections required by the Holden Maintenance Schedule.**

Engine exhaust cautions

CAUTION:

- **Avoid inhaling the engine exhaust. It contains carbon monoxide, which is a colourless and odourless gas. It can cause unconsciousness or even death.**
- **Make sure the exhaust system has no holes or loose connections. The system should be checked from time to time. If you hit something, or notice a change in the sound of the exhaust, have the system checked immediately.**
- **Do not run the engine in a garage or enclosed area except for the time needed to drive the vehicle in or out. The exhaust gases cannot escape, making this a particularly dangerous situation.**
- **Do not remain for a long time in a parked vehicle with the engine running. If it is unavoidable however, do so only in an unconfined area and adjust the heating or cooling system to force outside air into the vehicle.**

continued overleaf

- **Keep the trunk lid, or tailgate closed while driving. An open or unsealed trunk lid, or tailgate may cause exhaust gases to be drawn into the vehicle. If you must drive with the trunk lid, or tailgate open to accommodate a large object, close the windows, open all the dashboard vents and have the heating or cooling system deliver fresh air into the vehicle by turning the fan to high speed with the air intake control set at the FRESH or OUTSIDE AIR position.**
- **To allow proper operation of your vehicle's ventilation system, keep the inlet grilles in front of the windshield clear of snow, leaves, or other obstructions.**
- **If you smell exhaust fumes in the vehicle, drive with the windows open and the trunk lid, or tailgate closed. Have the cause immediately located and corrected.**

Facts about engine oil consumption

Functions of engine oil

Engine oil has the primary functions of lubricating and cooling the inside of the engine, and plays a major role in maintaining the engine in proper working order.

Engine oil consumption

It is normal that an engine should consume some engine oil during normal engine operation. The causes of oil consumption in a normal engine are as follows.

- Oil is used to lubricate pistons, piston rings and cylinders. A thin film of oil is left on the cylinder wall when a piston moves downwards in the cylinder. High negative pressure generated when the vehicle is decelerating sucks some of this oil into the combustion chamber. This oil as well as some part of the oil film left on the cylinder wall is burned by the high temperature combustion gases during the combustion process.
- Oil is also used to lubricate the stems of the intake valves. Some of this oil is sucked into the combustion chamber together with the intake air and is burned along with the fuel. High temperature exhaust gases also burn the oil used to lubricate the exhaust valve stems.

The amount of engine oil consumed depends on the viscosity of the oil, on the quality of the oil and on the conditions the vehicle is driven under.

More oil is consumed under such driving conditions as high speeds and frequent acceleration and deceleration.

A new engine consumes more oil, since its pistons, piston rings and cylinder walls have not become conditioned.

When judging the amount of oil consumption, note the oil may become diluted and make it difficult to judge the true level accurately.

As an example, if a vehicle is used for repeated short trips, and consumes a normal amount of oil, the dipstick may not show any drop in the oil level at all, even after 1000 km or more. This is because the oil is gradually becoming diluted with fuel or moisture, making it appear that the oil level has not changed.

The diluting ingredients evaporate out when the vehicle is then driven at high speeds, as on a highway, making it appear that oil is excessively consumed after driving at high speeds.

Importance of engine oil level check

One of the most important points in proper vehicle maintenance is to keep the engine oil at the optimum level so that oil function will not be impaired. Therefore, it is essential that the oil level be checked regularly. Holden recommends that the oil level be checked every time you refuel the vehicle.

NOTICE:

Failure to check the oil level regularly could lead to serious engine damage due to insufficient oil.

For detailed information on oil level check, see "Checking the engine oil level" Chapter 7-2.

Brake system

Tandem master cylinder brake system

The tandem master cylinder brake system is a hydraulic system with two separate sub-systems. If either sub-system should fail, the other will still work. However, the pedal will be harder to press, and your stopping distance will be longer. Also, the brake system warning light may come on.

CAUTION:

Do not rely on a single brake system. Have your brakes fixed immediately.

Brake booster

The brake booster uses engine vacuum to power-assist the brakes. If the engine should stop while you are driving, you can bring the vehicle to a stop with normal pedal pressure. There is enough reserve vacuum for one or two stops — but no more!

CAUTION:

- **Do not pump the brake pedal if the engine stalls. Each push on the pedal uses up your vacuum reserve.**
- **Even if the power assist is completely lost, the brakes will still work. But you will have to push the pedal hard, much harder than normal. And your braking distance will be longer.**

Anti-lock brake system (vehicles with anti-lock brake system warning light).

The anti-lock brake system is designed to prevent lock-up of the wheels during sudden braking or braking on slippery surfaces to help the vehicle remain steerable and stable in such situations

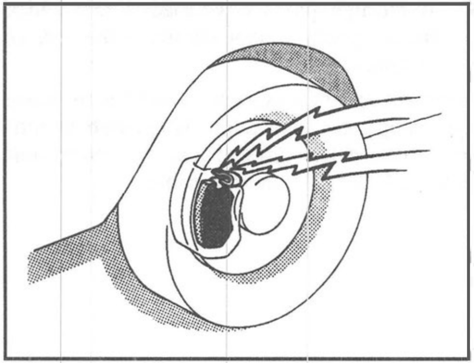
The system functions with normal pedal operation. When the anti-lock function is in action, a pulsation of the brake pedal may result, together with a characteristic noise. This indicates that the system is functioning properly.

When driving with the anti-lock brake system, keep the following in mind and adjust your driving according to the road and traffic conditions.

- Even with the anti-lock brake system, your vehicle still requires a sufficient stopping distance. Always maintain a safe distance from the vehicle in front of you.
- Always slow down when cornering. The anti-lock brake system cannot prevent accidents resulting from excessive speeds.
- On rough, gravel or snow-covered roads, etc., operation of the anti-lock brake system may result in a longer stopping distance than for vehicles not fitted with anti-lock brake system, so take this into account and reduce your speed.
- Avoid high speeds on wet roads. The anti-lock brake system cannot eliminate the risk of aquaplaning.

If the anti-lock brake system should fail, the brake system operates conventionally but without anti-lock function. Have your vehicle checked by your Holden dealer as soon as possible.

Brake pad wear indicators (if applicable)



The brake pad wear indicators on your disc brakes give a warning noise when the brake pads are worn to where replacement is required.

If you hear a squealing or scraping noise while driving, have the brake pads checked and replaced by your nearest Holden dealer immediately.

Avoid continuous driving with the warning noise.

Continuous driving without replacing the brake pads will cause expensive rotor damage and increasing brake pedal effort to get the same stopping distance.

Luggage stowage precautions

When stowing luggage or cargo in the vehicle, observe the following:

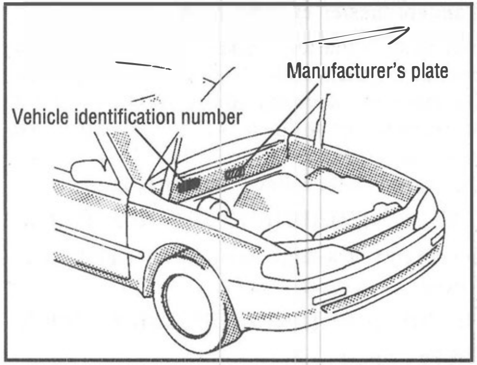
- Put luggage or cargo in the trunk or luggage compartment when at all possible. Be sure all items are secured in place.
- Be careful to keep the vehicle balanced. Locating the weight as far forward as possible helps maintain this.
- For better fuel economy, do not carry unneeded weight.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

- **To prevent luggage or packages from sliding forward during braking, do not stack anything in the enlarged trunk room or luggage compartment higher than the seat backs.**
- **Never allow anyone to ride in the enlarged trunk room or luggage compartment. It is not designed for passengers. They could be injured in sudden braking.**
- **Do not place anything on the filler panel behind the rear seat back or luggage cover. Such items may be thrown about and possibly injure people in the vehicle during sudden braking or an accident.**

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Your Holden's identification

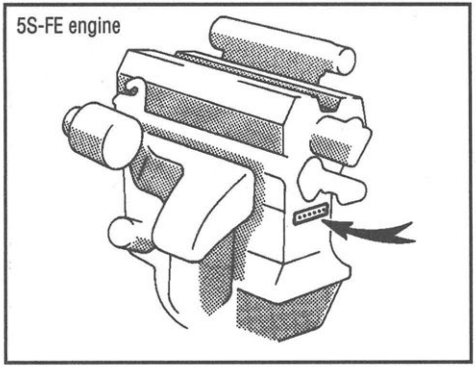


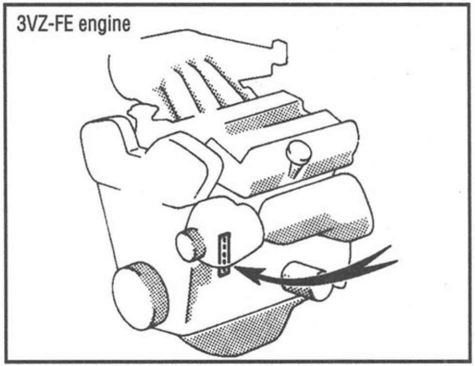
Vehicle Identification Number (VIN) is stamped on the engine compartment bulkhead.

The manufacturer's plate, mounted on the same bulkhead, contains VIN, Model data and date of manufacture (see below).

Date of manufacture means:

The date of manufacture, hereinafter called the "Built Date" is the calendar month and year in which the body shell and power train sub-assemblies are conjoined and the vehicle is driven or moved from the production line.


5S-FE engine


3VZ-FE engine

The engine number is stamped on the engine block as shown.

Part 3
STARTING AND DRIVING —

- Before starting the engine
- How to start the engine
- Pretrip safety check
- Tips for driving in various conditions
- Winter driving tips
- How to save fuel and make your vehicle last longer
- Trailer towing

Before starting the engine

1. Check the area around the vehicle before entering it.
2. Adjust seat position, seat back angle, head restraint height and steering wheel angle.
3. Adjust inside and outside rear view mirrors.
4. Close all doors.
5. Fasten seat belts.

How to start the engine

(a) Before cranking

1. Apply the parking brake firmly.
2. Turn off unnecessary lights and accessories.
3. **Manual transmission:** Press the clutch pedal to the floor and shift the transmission into neutral. Hold the clutch pedal to the floor until the engine is started.

   Automatic transmission: Put the selector lever in "P". If you need to restart the engine while the vehicle is moving, put the selector lever in "N". A starter safety device will prevent the starter from operating if the selector lever is in any drive position.
4. **Automatic transmission only:** Depress the brake pedal and hold it depressed until just prior to driving off. Put the selector lever into “P” or “N”.

continued overleaf

(b) Starting the engine

Before starting the engine, be sure to follow the instructions in "(a) Before cranking".

Normal starting procedure

The electronic fuel injection system in your engine automatically controls the proper air-fuel mixture for starting. So you can start the cold or hot engine as follows:

1. With your foot off the accelerator pedal, crank the engine by turning the key to "START". Release it when the engine starts.
2. After the engine runs for a few minutes, you are ready to drive.

If the weather is below freezing, let the engine warm up for a few minutes longer before driving.

If the engine stalls...

Simply restart it, using the correct procedure given in normal starting.

If the engine will not start...

See "If your vehicle will not start" in Part 4

NOTICE:

Do not crank for more than 15 seconds at a time. This may overheat the starter and wiring systems.

Do not race a cold engine.

If the engine becomes difficult to start or stalls frequently, have the engine checked immediately.

Pre-trip safety check

It is a good idea to conduct a safety check before starting out on a trip. A few minutes of checking can help ensure safe and pleasant driving. Just a basic familiarity with your vehicle is required and a careful eye! Or, if you would like, your Holden dealer will be pleased to make this check for you at a nominal cost.

CAUTION:

If you make this check in an enclosed garage, make sure there is adequate ventilation. Engine exhaust is poisonous.

Before starting the engine

Outside the vehicle

Tyres. Check the pressure with a gauge and look carefully for cuts, damage, or excessive wear.

Wheel nuts. Make sure no nuts are missing or loose.

Fluid leaks. After the vehicle has been parked for a while, check underneath for leaking fuel, oil, water, or fluid. (Water dripping from the air conditioner after use is normal.)

Wiper blades. Look for wear or cracks.

Lights. Make sure that the headlights, stop lights, tail lights, turn signals and other lights are all working. Check the headlight aim.

Inside the vehicle

Jack and wheel nut wrench. Make sure you have your jack and wheel nut wrench.

Seat belts. Check that the buckles lock securely. Make sure that the belts are not worn or frayed.

Horn. Does it work?

Instruments and controls. Especially make sure that the warning lights, instrument lights and defroster are working.

Wipers and washer. Make sure that they both work and that the wipers do not streak.

Brakes. Make sure that the pedal has enough clearance. (See Chapter 7-2 for instructions.)

Spare fuses. Make sure you have spare fuses. They should cover all the amperage ratings designated on the fuse box lid.

In the engine compartment

Coolant level. Make sure that the coolant level is correct. (See Chapter 7-2 for instructions.)

Radiator and hoses. Make sure the front of the radiator is clean — not blocked with leaves, dirt, or bugs. Check the hoses for cracks, kinks, deterioration, and loose connections.

Battery and cables. All the battery cells should be filled to the proper level with distilled water. Look for corroded or loose terminals and a cracked case. Check the cables for good condition and connections.

Wiring. Look for damaged, loose, or disconnected wires.

Brake and clutch fluid levels. Make sure that the brake and clutch fluid levels are correct. (See Chapter 7-2 for instructions.)

Engine drive belts. Check all belts for fraying, cracks, wear or oiliness. Apply thumb pressure between the pulleys. The deflection of each belt should be within the specified limits. (See Chapter 7-2 for instructions.)

Fuel lines. Check the lines for leaks or loose connections.

After starting the engine

Exhaust system. Look for cracks, holes and loose supports. Listen for any leakage. Have any leaks fixed immediately. (See "Engine exhaust cautions", Part 2.)

Automatic transmission fluid. Check the dipstick with the engine idling and the selector lever in “P”. (See Chapter 7-2 for instructions.)

Power steering fluid. With the engine idling, give the steering wheel several end-to-end turns and check the fluid level. (See Chapter 7-2 for instructions.)

Engine oil level. Stop the engine and check the dipstick with the vehicle parked on a level spot. (See Chapter 7-2 for instructions.)

While driving

Instruments. Make sure that the speedometer and gauges are working.

Brakes. At a safe place make sure the brakes do not pull the vehicle to one side.

Anything unusual? Look for loose parts and leaks. Listen for abnormal noises.

If everything looks O.K., set your mind at ease and enjoy your trip!

Tips for driving in various conditions

- Always slow down in gusty crosswinds. This will allow you much better control.
- Drive slowly onto curbs and, if possible, at a right angle. Avoid driving onto high, sharp-edged objects and other road hazards. Failure to do so can lead to severe tyre damage resulting in the tyre bursting.
- When parking on a hill, turn the front wheels until they touch the curb so that the vehicle will not roll. Apply the parking brake, and place the transmission in "P" (automatic) or in first or reverse (manual). If necessary, block the wheels.
- Washing your vehicle or driving through deep water may get the brakes wet. To see whether they are wet, check that there is no traffic near you and then press the pedal lightly. If you do not feel a normal braking force, the brakes are probably wet. To dry them, drive the vehicle cautiously while lightly pressing the brake pedal with the parking brake pulled. If they still do not work safely, pull to the side of the road and call a Holden dealer for assistance. Do not drive the vehicle if the brakes are not working safely or if you suspect there is a problem.

CAUTION:

- **Before driving off, make sure that the parking brake is fully released and the parking brake reminder light is off.**
- **Do not leave your vehicle unattended while the engine is running. Do not rest your foot on the brake pedal while driving. It can cause dangerous overheating, needless wear, poor fuel economy and increase the possibility of the brakes not working properly.**
- **To drive down a long or steep hill, reduce your speed and downshift. Remember, if you ride the brakes excessively, they may overheat and not work properly.**
- **Be careful when accelerating, upshifting, downshifting or braking on a slippery surface. Sudden acceleration or engine braking could cause the vehicle to spin or skid.**
- **Do not continue normal driving when the brakes are wet. If they are wet, your vehicle will require a longer stopping distance and it may pull to one side when the brakes are applied. Also, the parking brake will not hold the vehicle securely.**

NOTICE:

When driving on wet roads, avoid driving through large amounts of standing water on the road. Large amounts of water entering the engine compartment may cause damage to the engine and/or electrical components.

Winter driving tips

To prevent the coolant from freezing, your engine cooling system must contain an ethylene-glycol based antifreeze containing corrosion inhibitor. For further information on engine coolant, refer to "Changing the engine coolant" and "Engine coolant type selection" in part 7-2.

NOTICE:

Do not use alcohol type antifreeze.

Check the condition of the battery and cables.

Cold temperatures reduce the capacity of any battery, so it must be in good condition to provide enough power for winter starting. Chapter 7-3 tells you how to visually inspect the battery. Your Holden dealer and most service stations will be pleased to check the level of charge.

Make sure the engine oil viscosity is suitable for the cold weather.

See Chapter 7-2 for recommended viscosity. Leaving a heavy summer oil in your vehicle during winter months may cause harder starting. If you are not sure about which oil to use, call your Holden dealer — he will be pleased to help.

Check the spark plugs and ignition system.

Make sure the plugs are not worn, fouled, or incorrectly gapped. (Section 7-2 has instructions for inspecting.) Visually check the rest of the system for loose connections or obvious damage.

Keep the door locks from freezing.

Squirt lock de-icer or glycerine into the locks to keep them from freezing. To open a frozen lock, try heating the key before inserting it.

Use a washer fluid containing an anti-freeze solution.

This product is available at your Holden dealer and most auto parts stores. Follow the manufacturer's directions for how much to mix with water.

NOTICE:

Do not use engine anti-freeze or any other substitute as washer fluid because it may damage your vehicle's paint.

Do not use your parking brake when there is a possibility it could freeze.

When parking, put the transmission into "P" (automatic) or into first or reverse (manual) and block the rear wheels. Do not use the parking brake or snow or water accumulated in and around the parking brake mechanism may freeze the parking brake and make it hard to release.

Keep ice and snow from accumulating under the fenders.

Ice and snow built up under your fenders can make steering difficult. During bad winter driving, stop and check under the fenders occasionally.

Depending on where you are driving, we recommend you carry some emergency equipment.

Some of the things you may put in the vehicle are tyre chains, window scraper, flares, small shovel, jumper cables, tools, etc.

How to save fuel and make your vehicle last longer

Getting more kilometres from a litre of fuel is simple — just take it easy. It will help make your vehicle last longer, too. Here are some specific tips on how to save money on both fuel and repairs:

- **Keep your tyres inflated at the correct pressure.** Under-inflation causes tyre wear and wastes fuel. See Chapter 7-2 for instructions.
- **Do not carry unneeded weight in your vehicle.** Excess weight puts a heavier load on the engine, causing greater fuel consumption.
- **Avoid lengthy warm - up idling.**

  Once the engine is running smoothly, begin driving—but gently. Remember however, that in cold winter days this may take a little longer.
- **Accelerate slowly and smoothly.** Avoid jerky starts. Get into high gear as quickly as possible.
- **Avoid long engine idling.** If you have a long wait and you are not in traffic, it is better to turn off the engine and start again later.
- **Avoid engine lug or over-revving.** Use a gear range suitable for the road you are travelling on.
- **Use your air conditioner only when absolutely necessary.** The air conditioner puts an extra load on the engine.
- **Avoid continuous speeding up and slowing down.** Stop-and-go driving wastes fuel.
- **Avoid unnecessary stopping and braking.** Maintain a steady pace. Try to time the traffic signals so you only need to stop as little as possible or take advantage of through streets to avoid traffic lights. Keep a proper distance from other vehicles to avoid sudden braking. This will also reduce wear on your brakes.
- **Avoid heavy traffic or traffic jams whenever possible.**
- **Do not rest your foot on the clutch or brake pedal.** This causes needless wear, overheating and poor fuel economy.
- **Maintain a moderate speed on highways.** The faster you drive, the greater the fuel consumption. By reducing your speed, you will cut down on fuel consumption.
- **Keep the front wheels in proper alignment.** Avoid hitting the curb and slow down on rough roads. Improper alignment not only causes faster tyre wear but also puts an extra load on the engine, which, in turn, wastes fuel.
- **Keep the bottom of your vehicle free from mud, etc.** This not only lessens weight but also helps prevent corrosion.
- **Keep your vehicle tuned-up and in top shape.** A dirty air cleaner, improper valve clearance, dirty plugs, dirty oil and grease, brakes not adjusted, etc. all lower engine performance and contribute to poor fuel economy. For longer life of all parts and lower operating costs, keep all maintenance work on schedule and if you often drive under severe conditions, see that your vehicle receives more frequent maintenance. For further details on maintenance requirements, refer to Part 6.

CAUTION:

Never turn off the engine to coast down hills. Your power steering and brake booster will not function without the engine running. Also, the emission control system operates properly only when the engine is running.

Trailer towing

Your vehicle is designed primarily as a passenger-carrying vehicle. Towing a trailer will have an effect on handling, performance, braking, durability and driving economy (fuel consumption, etc.). Your safety and satisfaction depend on the proper use of correct equipment and cautious driving habits. For your safety and the safety of others, you must not overload your vehicle or trailer. Holden warranties do not apply to damage or malfunction caused by towing a trailer for commercial purposes. Ask your local Holden dealer for further details before towing.

Weight limits

Before towing, confirm that the towing capacity of your vehicle is not exceeded. For towing capacity specifications, see Part 8.

Towing capacity has been tested at sea level. If you have to go to a high mountain area, keep in mind that power and towing capacity will decrease.

Towing equipment

Holden recommends using only towing equipment which has been designed and type-approved for your vehicle.

Tyres

- Ensure that your vehicle's tyres are properly inflated. See Part 8 for instructions.
- The trailer tyres should be inflated to the pressure recommended by the trailer manufacturer in respect to the total trailer weight.

Trailer lights

- To facilitate installation of electrical wiring for trailer lights, your vehicle is equipped with a trailer harness connector. On sedan models, the connector is located in the trunk behind the top of the right hand side trim. On station wagon models, the connector is located in the rear of the luggage compartment behind the bottom of the left hand side trim.
  Use this connector when installing electrical wiring for your trailer lights.
  Avoid direct splicing. Direct splicing may damage your vehicle's electrical system and cause a malfunction of your lights.

  Note: A trailer harness loom is available fron your Holden dealer.
- Check for correct operation of the turn signals, stop and tail lights each time you hitch up.

Break-in schedule

- Holden recommends that you do not tow a trailer with a new vehicle or a vehicle with any new power train component (engine, transmission, differential, wheel bearing, etc.) for the first 800 km of driving.

Maintenance

- If you tow a trailer, your vehicle will require more frequent maintenance due to the additional load. Refer to section B of this handbook for more detailed information on maintenance requirements when towing.

Pre-towing safety check

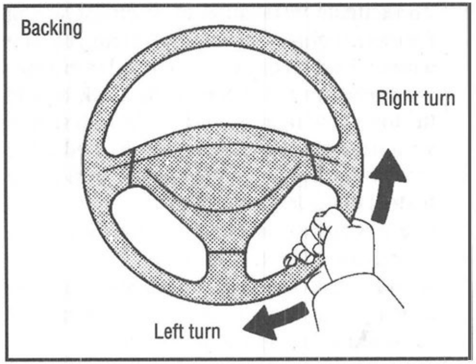
- Be sure not to exceed designated maximum load for the ball coupling of the tow bar. Please remember that the ball coupling load will increase the load on the vehicle. Maximum permissible rear axle capacity must not be exceeded.
- Be sure the trailer cargo load is adequately secured so that it will not shift.

continued overleaf

Trailer towing tips

When towing a trailer, your vehicle will handle differently than when not towing. Keep the following points in mind when towing:

- Before starting out, check operation of the lights and all vehicle-trailer connections. After driving a short distance, stop and re-check the lights and connections. Before actually towing a trailer, practice turning, stopping and backing with a trailer in an area away from traffic until you learn the feel.
- Because stopping distance may be increased, vehicle-to-vehicle distance should be increased when towing a trailer. For each 10 km/h of speed, allow at least one vehicle and trailer length between you and the vehicle ahead. Avoid sudden braking as you may skid, resulting in jackknifing and loss of control. This is especially true on wet or slippery surfaces .
- Avoid jerky starts or sudden acceleration. If your vehicle has a manual transmission, prevent excessive clutch slippage by keeping engine rpm low and not racing the engine. Always start out in first gear.
- Avoid jerky steering and sharp turns. The trailer could hit your vehicle in a tight turn. Slow down before making a turn to avoid the necessity of sudden braking.



- Backing with a trailer is difficult and requires practice. Have someone guide you when backing to reduce the risk of an accident.
- Remember that when making a turn, the trailer wheels will be closer than the vehicle wheels to the inside of the turn. Therefore, compensate for this by making a larger than normal turning radius with your vehicle.
- Crosswinds and rough roads will adversely affect handling of your vehicle and trailer, causing sway. Pay attention to the rear from time to time to prepare yourself for being passed by large trucks or buses which may cause your vehicle and trailer to sway. If swaying occurs, firmly grip the steering wheel and reduce speed immediately but gradually. Never increase speed. If it is necessary to reduce speed, brake slowly. Steer straight ahead. If you make no extreme correction with the steering or brakes, the vehicle and trailer will stabilize.
- Be careful when passing other vehicles. Passing requires considerable distance. After passing a vehicle, do not forget the length of your trailer and be sure you have plenty of room before changing lanes.
- In order to maintain engine braking efficiency, do not use fifth gear (manual transmission) or overdrive (automatic transmission).

- Because of the added load of the trailer, your vehicle's engine may overheat on hot days (at temperatures over 30°C) when going up a long or steep grade. If the engine temperature gauge indicates overheating, immediately turn off the air conditioner (if in use), pull off the road and stop in a safe spot. Refer to "If your vehicle overheats", Part 4.
- Always place wheel blocks under both the vehicle and trailer wheels when parking. Apply the parking brake firmly. Put the transmission in "P" (automatic) or in first or reverse (manual).

CAUTION:

- **Observe the legal maximum speeds for trailer towing.**
- **Slow down and downshift before descending steep or long downhill grades. Do not make sudden downshifts.**
- **Avoid holding the brake pedal down too long or too frequently. This could cause the brakes to overheat and result in reduced braking efficiency.**

NOTICE:

Ensure that the tow bar does not obscure the rear licence plate. If necessary, remove the tow ball or tow bar tongue when not required for towing.

Part 4
IN CASE OF AN EMERGENCY —

- If your vehicle will not start
- If your engine stalls while driving
- If your vehicle overheats
- If you have a flat tyre
- If your vehicle needs to be towed
- Emergency towing

If your vehicle will not start —
(a) Simple checks

Before making these checks, make sure that you have followed the correct starting procedure given in "How to start the engine" in Part 3 and that you have sufficient fuel.

If the engine is not turning over or is turning over too slowly —

1. Check that the battery terminals are tight and clean.

2. If the battery terminals are O.K., switch on the interior light.

3. If the light is out, dim or goes out when the starter is cranked, the battery is discharged. Your vehicle cannot be push started. See "Jump starting", Part 4, for further instructions.

If the light is O.K., but the engine still will not start, it needs adjustment or repair. Call a Holden dealer or qualified repair shop.

NOTICE:

Do not pull or push start the vehicle. It may damage the vehicle or cause a collision when the engine starts. Also, the catalytic converter may overheat and become a fire hazard.

If the engine turns over at its normal speed but will not start —

1. Check that all the push-on connectors are tight at the ignition coil, distributor and spark plugs.

See Chapter 7-1 for locations of these parts.

2. If the connectors are O.K., the engine may be flooded because of repeated cranking. See "(b) Starting the flooded engine" for further instructions.

continued overleaf

(b) Starting the flooded engine

If the engine will not start, your engine may be flooded because of repeated cranking.

If this happens turn the key to "START" with the accelerator pedal held down. Continue cranking the engine with the accelerator pedal held down for 15 seconds and release them. Then try starting the engine with your foot off the accelerator pedal.

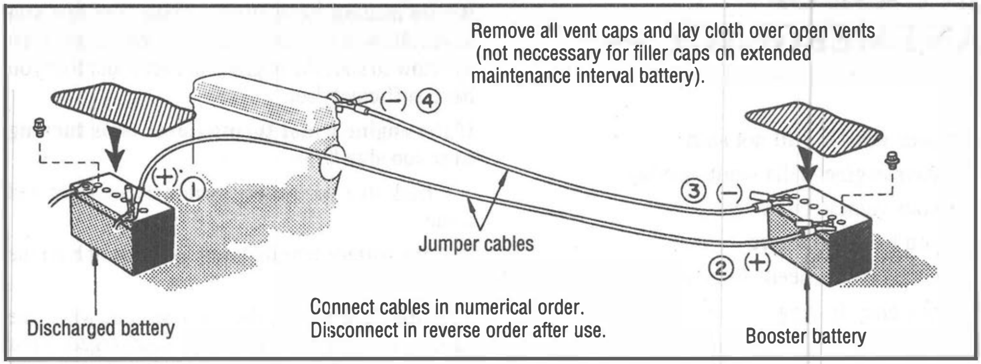
If the engine does not start after 15 seconds of cranking, release the key, wait a few minutes and try again.

If the engine still will not start, it needs adjustment or repair. Call a Holden dealer or qualified repair shop for assistance.

NOTICE:

Do not crank for more than 15 seconds at a time. This may overheat the starter and wiring systems.

Jump starting



Remove all vent caps and lay cloth over open vents (not neccessary for filler caps on extended maintenance interval battery).

Connect cables in numerical order.
Disconnect in reverse order after use.

To avoid serious personal injury and damage to your vehicle which might result from battery explosion, acid burns, electrical burns, or damaged electronic components, these instructions must be followed precisely.

If you are unsure about how to follow this procedure, we strongly recommend that you seek the help of a competent mechanic or towing service.

CAUTION:

- **Batteries contain sulphuric acid which is poisonous and corrosive. Wear protective safety glasses when jump starting and avoid spilling acid on your skin, clothing or vehicle.**
- **If you should accidentally get acid on yourself or in your eyes, remove any contaminated clothing and flush the affected area with water for at least 15 minutes. Then get immediate medical attention. If possible, continue to apply water with a sponge or cloth while enroute to the medical office.**

- **The gas normally produced by a battery will explode if a flame or spark is brought near. Use only standardised jumper cables and do not smoke or light a match while jump starting.**

NOTICE:

The battery used for boosting must be 12-volt. Do not jump start unless you are sure that the booster battery is correct.

Jump starting procedure

1. If the booster battery is installed in another vehicle, make sure that the vehicles are not touching. Turn off all unnecessary lights and accessories.

2. Remove all vent caps from the booster and discharged batteries. Lay a cloth over the open vents on both batteries. (This helps reduce the explosion hazard.)

3. If the engine in the vehicle with the booster battery is not running, start it and let it run for a few minutes. During jumping run the engine at about 2000 rpm with the accelerator pedal lightly depressed.

4. Connect the jumper cables in the exact order shown in the illustration: positive-to positive(+) and negative-to-engine or body ground(—). Note that you first connect the positive cable to the discharged battery and then to the booster battery. Next, connect the negative cable to the booster battery and then to a solid, stationary, metallic point (e.g. engine hanging hook) away from the battery. Do not connect it to or near any part that moves when the engine is cranked.

NOTICE:

When making the connections, do not lean over the battery or accidentally let the jumper cables or clamps touch anything except the correct battery terminals or the ground.

5. Start your engine in the normal way. After starting, run it at about 2000 rpm for several minutes with the accelerator pedal lightly depressed.

6. Carefully disconnect the cables in the exact reverse order: the negative cable and then the positive cable.

7. Carefully dispose of the battery cover cloths—they may now contain sulphuric acid.

8. Replace all the battery vent caps.

If the cause of your battery discharging is not apparent (for example, lights left on), you should have it checked.

If your engine stalls while driving

If your engine stalls while driving...

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.

2. Turn on your emergency flashers.

3. Try starting the engine again.

If the engine will not start, see "If your vehicle will not start".

CAUTION:

If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.

If your vehicle overheats

If your temperature gauge indicates overheating, if you experience a loss of power, or if you hear a loud knocking or pinging noise, the engine has probably overheated. You should follow this procedure...

1. Pull safely off the road, stop the vehicle and turn on your emergency flashers. Put the transmission in "P" (automatic) or neutral (manual) and apply the parking brake. Turn off the air conditioner if it is being used.

2. If coolant or steam is boiling out of the radiator or reservoir, stop the engine. Wait until the steam subsides before opening the hood. If there is no coolant boiling over or steam, leave the engine running and make sure that the engine cooling fan is operating. If it is not, turn the ignition off.

CAUTION:

To help avoid personal injury, keep the hood closed until there is no steam. Escaping steam or coolant is a sign of very high pressure.

3. Visually check to see if the engine drive belt (water pump belt) is broken or loose. Look for obvious coolant leaks from the radiator, hoses, and under the vehicle. However, note that water draining from the air conditioner is normal if it has been used.

CAUTION:

When the engine is running, keep hands and clothing away from the moving fan and engine drive belts.

NOTICE:

The level of the coolant in the see-through reservoir does not always indicate the coolant content of the system. For instance, if there has been a sudden loss of coolant, the level in the reservoir will not drop. On such an occasion, remove the radiator cap (5S-FE engine) or coolant filler cap (3VZ-FE engine) when the engine has cooled enough and check the coolant level. Top up the cooling system if necessary. Always check for coolant leaks before restarting the engine. If a leak is found, or the coolant level is dropping, contact your Holden dealer before driving the vehicle.

CAUTION:

Do not attempt to remove the radiator cap (5S-FE engine) or coolant filler cap (3VZ-FE engine) when the engine and radiator are hot. Serious injury could result from scalding hot fluid and steam blown out under pressure.

4. If the engine drive belt is broken or the coolant is leaking, stop the engine immediately. Call a Holden dealer for assistance.

5. If the engine drive belt is okay and there are no obvious leaks, check the coolant reservoir. If it is dry, add water to the reservoir while the engine is running. Fill it about half full.

You may help the engine cool down more quickly by running it at a fast idle for a few minutes. Make sure the air conditioner is OFF.

NOTICE:

Vehicles with 5S-FE engine have a temperature controlled electrical cooling fan which will rotate when the engine is running and overheating. If it does not rotate, an electrical failure has occurred. Switch the ignition OFF immediately and contact your nearest Holden dealer.

6. After the engine temperature has cooled to normal, again check the coolant level in the reservoir. If necessary, bring it up to half full again. Serious coolant loss indicates a leak in the system. You should have it checked as soon as possible at your Holden dealer.

NOTICE:

The engine in your vehicle is equipped with a by-pass valve. Therefore, if the engine tends to overheat, removal of the thermostat would have an adverse effect causing a lowering of cooling efficiency.

If you have a flat tyre —

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place well away from the traffic. Avoid stopping on the centre divider of a highway. Park on a level spot with firm ground.

2. Stop the engine and turn on your emergency flashers.

3. Firmly apply the parking brake and put the transmission in "P" (automatic) or reverse (manual).

4. Have everyone get out of the vehicle on the side away from traffic.

5. Read the following instructions thoroughly.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

When jacking, be sure to observe the following to reduce the possibility of personal injury:

- **Follow jacking instructions.**
- **Use a jack only for lifting your vehicle during wheel changing.**
- **Never get beneath the vehicle when supported by a jack.**
- **Do not start or run the engine while your vehicle is supported by a jack.**

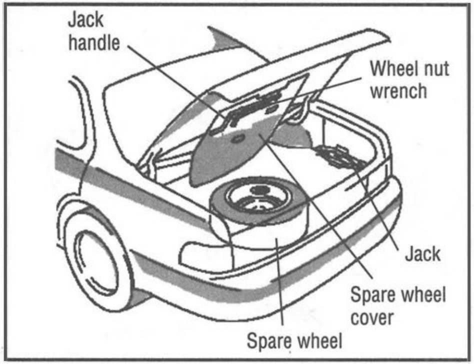
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

NOTICE:

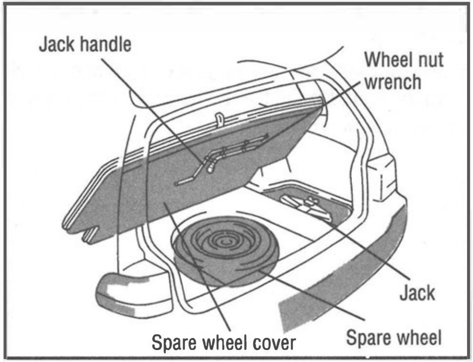
Do not continue driving with a deflated tyre. Driving even a short distance can damage a tyre beyond repair.

Location of required parts

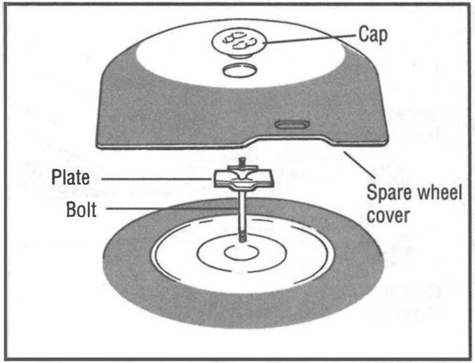
Sedan



Wagon



1. Remove the spare wheel and tools



a. Loosen the cap and remove it.

b. Remove the spare wheel cover .

c. Unclip the jack handle and wheel nut wrench from the underside of the spare wheel cover.

d. Loosen and remove the bolt and plate.

e. Take the spare wheel out of the vehicle.

When storing the spare wheel, put it into place with the outer side facing up. Then secure the wheel by repeating the above removal steps in reverse order to prevent it from flying forward during a collision or sudden braking.

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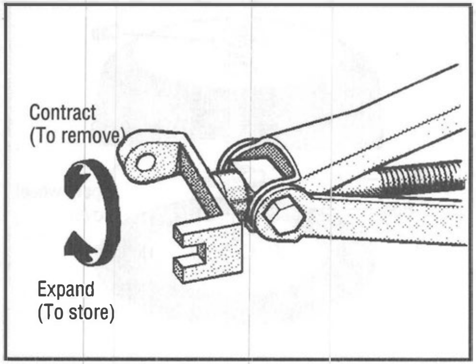
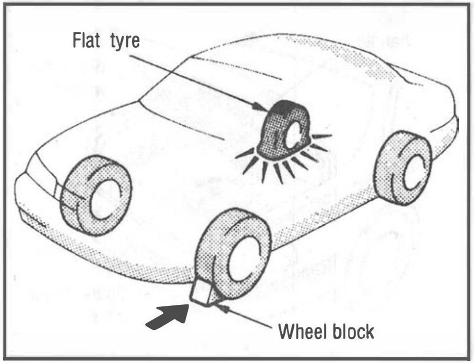
2. Remove the jack



When removing the jack, turn the joint by hand towards the CONTRACT direction until the jack is free. When storing, turn the joint by hand towards the EXPAND direction until the jack is firmly secured to prevent it from flying forward during a collision or sudden braking.

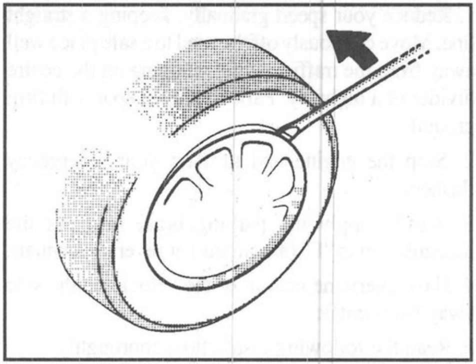
3. Block the wheel



Block the wheel diagonally opposite the flat tyre to keep the vehicle from rolling when it is jacked up.

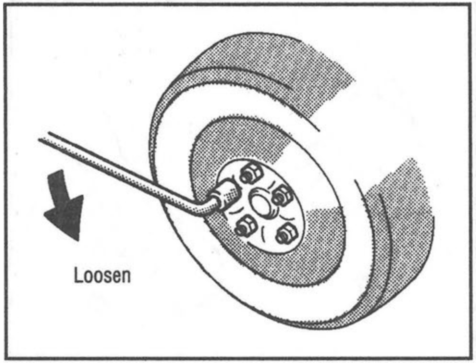
When blocking the wheel, place the wheel block from the front for the front wheels or from the rear for the rear wheels.

4. Remove wheel ornament



Pry off the wheel ornament using the beveled end of the wheel nut wrench as shown. To avoid personal injury, do not attempt to pull off the ornament by hand.

5. Loosen wheel nuts

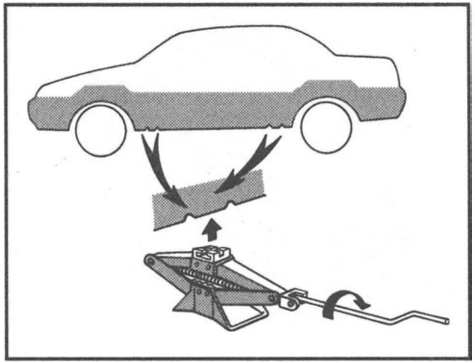


You should always loosen the wheel nuts slightly **before** raising the car.

The nuts turn **counter clockwise** to loosen. To get the maximum force, fit the wrench to the nut so that the handle is on the left side as shown above. Hold the wrench near the end of the handle and use your body weight to press down on the wrench.

Do not remove the nuts yet. Just unscrew them about one-half turn.

6. Position the jack



Position the jack at the correct jack point as shown.

Make sure the jack is positioned on level and solid ground.

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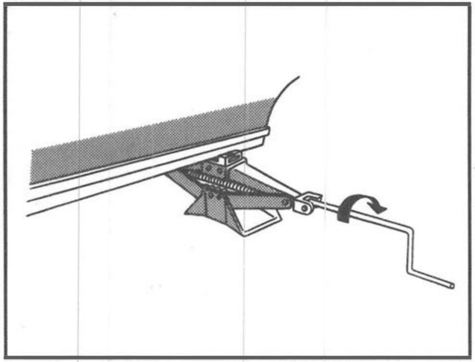
7. Raise your vehicle



After making sure that no one is in the vehicle, raise it high enough so that the spare wheel can be installed.

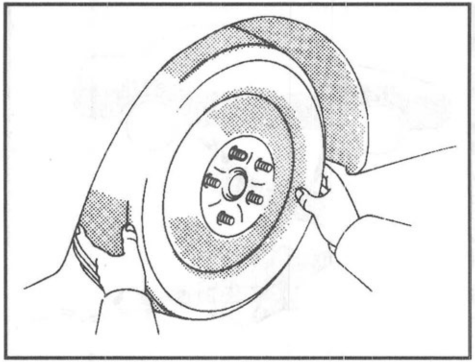
Remember you will need more ground clearance when putting on the spare wheel than when removing the flat tyre.

To raise the vehicle, insert the jack handle into the jack (it is a loose fit) and turn it clockwise. As the jack touches the vehicle and begins to lift, double-check that it is properly positioned.

CAUTION:

Never get under the car when it is supported only by a jack.

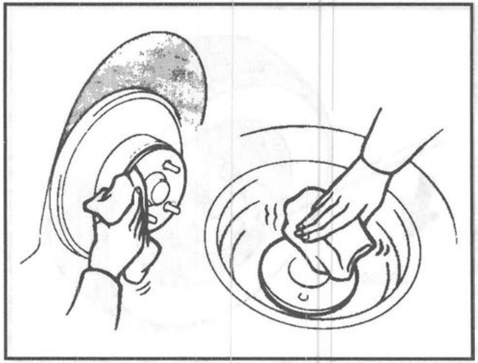
8. Change wheels



Remove the wheel nuts and change wheels

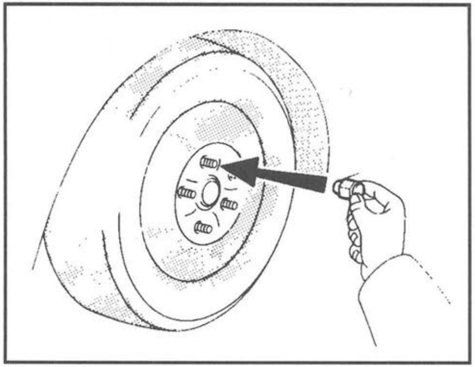
Lift the flat tyre straight off and put it aside.

Roll the spare wheel into position and align the holes in the wheel with the bolts. Then lift up the wheel and get at least the top bolt started through its hole. Wiggle the wheel and press it back over the other bolts.



Before putting on wheels, remove any foreign matter on the mounting surfaces. Installation of wheels without good metal-to-metal contact at the mounting surface can cause wheel nuts to loosen and eventually cause a wheel to come off while driving. Therefore, after the first 1600 km, check to see that the wheel nuts are tight.

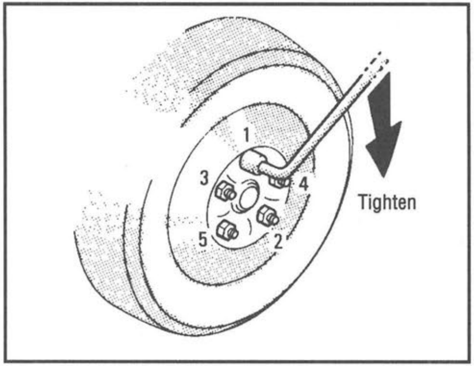
9. Reinstall wheel nuts



Reinstall all the wheel nuts finger tight.

Reinstall the wheel nuts (tapered end inward) and tighten them as much as you can by hand. Press back on the wheel and see if you can tighten them more.

10. Lower your vehicle and tighten wheel nuts



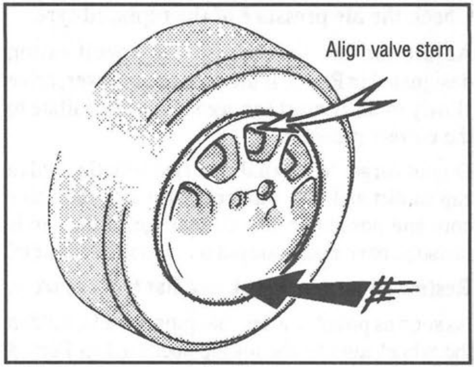
Lower the vehicle completely and tighten the wheel nuts.

Turn the jack handle counter clockwise to lower the vehicle.

Use only the wheel nut wrench to tighten the nuts. Do not use other tools or any additional leverage other than your hands, such as a hammer, pipe or your foot. Make sure the wrench is securely engaged over the nut.

Tighten each nut a little at a time in the order shown. Repeat the process until all the nuts are tight.

11. Reinstall wheel ornament



Put the wheel ornament into position and then tap it firmly with the side or heel of your hand to snap it into place.

continued overleaf

After changing the wheels

Check the air pressure of the replaced tyre.

Adjust the air pressure to the specification designated in Part 8. If the pressure is lower, drive slowly to the nearest service station and inflate to the correct pressure.

Do not forget to reinstall the tyre inflation valve cap as dirt and moisture could get into the valve core and possibly cause air leakage. If the cap is missing, have a new one put on as soon as possible.

Restow all the tools, jack and flat tyre securely.

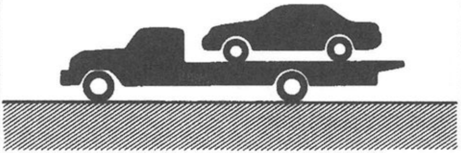
As soon as possible after changing wheels, tighten the wheel nuts to the torque specified in Part 8 with a torque wrench and have a technician repair the flat tyre.

CAUTION:

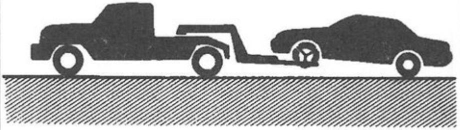
Before driving, make sure that all the tools, jack and flat tyre are securely in place in their storage location to reduce the possibility of personal injury during a collision or sudden braking.

If your vehicle needs to be towed

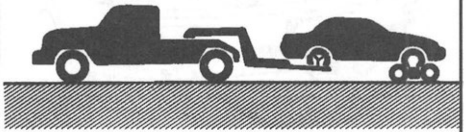
(a) Using flat bed truck



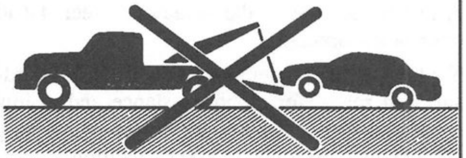
(b) Towing with wheel lift–
–From front



– From rear



(c) Towing with sling type



If towing is necessary, we recommend you have it done by your Holden dealer or a commercial tow truck service.

Proper equipment will help ensure that your vehicle is not damaged while being towed. Commercial operators are generally aware of the state and local laws pertaining to towing.

Your vehicle can be damaged if it is towed incorrectly. Although most operators know the correct procedure, it is possible to make a mistake. Rather than risk damage to your vehicle, why don't you make sure that the following few precautions are observed. If necessary, show this page to the tow truck driver.

Towing precautions

Use a safety chain system for all towing and abide by the state and local laws. The wheels and axle on the ground must be in good condition. If they are damaged, use a towing dolly.

(a) Using flat bed truck

Holden recommends this as the best method for your vehicle.

(b) Towing with wheel lift

From front – Release the parking brake.

continued overleaf

From rear –

- Manual transmission:
  We recommend using a towing dolly under the front wheels. If you do not use a towing dolly, put the transmission in neutral and place the ignition key in the "ACC" position.

  NOTICE:

  Do not tow with the key removed or in the "LOCK" position when towing from rear without a towing dolly. The steering lock mechanism is not strong enough to hold the front wheels straight.

- Automatic transmission:
  Use a towing dolly under the front wheels.
  NOTICE:

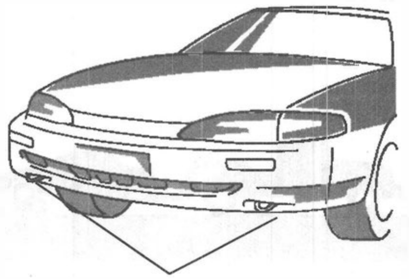
  Never tow a vehicle with an automatic transmission from the rear with the front wheels on the ground as this may cause serious damage to the transmission.

(c) Towing with sling type

NOTICE:

Do not tow with sling type. This may cause body damage.

Emergency towing



Emergency towing eyelets

If a towing service is not available in an emergency, your vehicle may be temporarily trailed by a cable secured to one of the emergency towing eyelets under the front of the vehicle.

A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads, for a short distance and at low speeds. Also, the wheels, axles, drive train, steering and brakes must all be in good condition.

Before towing, release the parking brake and put the transmission in neutral (manual) or "N" (automatic). The key must be in "ACC" (engine off) or "ON" (engine running).

CAUTION:

If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.

Part 5
CORROSION PREVENTION AND APPEARANCE CARE —

- Protecting your Holden from corrosion
- Washing and waxing your Holden
- Cleaning the interior

Protecting your Holden from corrosion

Diligent research and design, utilizing the most advanced technology available, have done their part to help prevent rust and have provided you with the finest quality in the construction of your car. Now, it is up to you. Proper care of your Holden can help ensure long-term rust prevention.

The most common causes of corrosion to your vehicle are:

- The accumulation of road salt, dirt and moisture in hard-to-reach areas under the car.
- Chipping of paint, or undercoating caused by minor accidents or by stones and gravel.

Your care is especially important if you live in a particular area or operate your car under certain environmental conditions:

- Road salt or dust control chemicals will accelerate rust as will the presence of salt in the air near the sea or in areas of industrial pollution.
- High relative humidity accelerates rust, especially when temperatures range just above the dew point (condensation temperature).
- Wetness or dampness to certain parts of your car for an extended period of time may cause rust even though other parts of the car may be dry.
- High temperatures will cause rust to those components of the car which are prevented from quick-drying due to lack of proper ventilation.

The above signifies the necessity to keep your car, particularly the underside, as clean as possible and to repair any damage to paint or protective coatings as soon as possible.

To help prevent corrosion on your Holden, follow these guidelines:

WASH YOUR CAR FREQUENTLY. It is, of course, necessary to keep your car clean by regular washing. However, to prevent rust or corrosion, the following points should be observed .

- If you drive on salted roads or if you live near the ocean, you should hose off the underside of the car at least twice a month to minimise rusting.
- High pressure water or steam is effective for cleaning the car's underside and wheel housings. Pay particular attention to these areas as it is difficult to see all the mud and dirt. It will do more harm than good to simply wet the mud and debris without removing them. The lower edge of doors, rocker panels and frame members have drain holes which should not be allowed to clog with dirt as trapped water in these areas can cause rust.

continued overleaf

- It is preferable that the underside of the car be washed thoroughly when winter is over.
- If your particular operating conditions are of a consistent adverse nature, your Holden dealer will be happy to advise you on additional rust prevention measures and undercoating.

After washing your car, make sure the brakes are fully dry before driving (see "Washing and waxing your Holden", this page, for more tips.)

Check the condition of the paint. If you find any chips or scratches in the paint, touch them up immediately to prevent rust from starting. Apply the paint soon after the damage occurs or rust may set in. To do a good job, stir the paint well and use a small artist's brush. Make sure the area is clean and dry. Only apply the smallest possible amount of paint to the area where the paint is missing. Do not paint on the surface around the scratch or chip. If the chip or scratches have gone through to the bare metal, have a recognised body shop make the repair.

Check the interior of your car. Water and dirt can accumulate under the floor mats or trunk mats and could cause rust. Occasionally check under the mats to make sure the area is dry. Be particularly careful when transporting chemicals, cleansers, fertilizers, salt, etc. These items should be transported in proper containers. If a spill or leak should occur, immediately clean and dry the area.

USE MUD FLAPS ON YOUR VEHICLE. If you drive on salted or gravel roads, mud flaps help protect your car. Therefore, if a mudflap is lost, a new one should be fitted as soon as possible.

DO NOT PARK YOUR CAR IN A DAMP, POORLY VENTILATED GARAGE. If you wash your car in the garage, or if you drive it in covered with water or snow, your garage may be so damp it will cause rust. Even if your garage is heated, a wet car can rust in it if the ventilation is poor.

Washing and waxing your Holden

Wash your car in the shade when the body is not hot to touch. Use a mild carwash soap and rinse it well.

Dirt can cause small scratches in the paint and the chemicals in some dirt and air pollutants can cause deterioration of the paint and trim. If you park or drive your Holden near the ocean or on salted roads, it is especially important to prevent corrosion.

Your vehicle can be washed in an automatic car wash. Remember, however, that the paint surface could then be scratched with the brushes. Scratches reduce the paint's gloss retention and durability. They can become apparent easily, especially on darker paints.

The following is an adequate procedure for washing your car by hand.

1. Begin by rinsing all loose dirt off the vehicle with a hose. If the underside has picked up mud or road salt, use a hard, direct stream from a hose to remove it.

2. Wash with a commercial car-wash product available at your Holden dealer or auto parts store. Follow the manufacturer's mixing instructions carefully. Dip your sponge or cloth into the wash bucket frequently and do not rub too hard. Let the soap and water remove the dirt.

To clean aluminium wheels, use only a mild soap or neutral detergent.

On plastic bumpers, remove dirt carefully and do not scrub with abrasive cleaners. The bumper face is soft.

Road tar may be removed with turpentine. Use warm water and car-wash soap for insects and tree sap. Commercial products are also available.

NOTICE:

Do not use petrol or strong solvents which may be toxic or cause damage.

3. Rinse the vehicle thoroughly. If any soap dries on the vehicle, it may cause streaking. In hot weather, you may have to rinse each section of the vehicle right after you wash it.

4. Dry the vehicle with a moist chamois or soft towel. The main purpose of drying is to remove excess water so that the vehicle will air without water spots. Do not rub or press hard, you might scratch the paint.

If you detect any stone chips or scratches in the paint, touch them up immediately to protect the bare metal from corrosion.

After washing your vehicle, make sure the brakes are fully dry before driving.

Polishing and waxing is recommended to maintain the original beauty of your Holden's finish.

1. Always wash and dry the vehicle before you begin waxing, even if you are using a combined cleaner and wax.

2. Use a good quality polish and wax. If the finish has become extremely weathered, use a car-cleaning polish, followed by a separate wax. Carefully follow the manufacturer's instructions and precautions. Be sure to polish and wax the chrome trim as well as the paint.

3. Wax the vehicle again when water does not bead but remains on the surface in large patches.

NOTICE:

Always remove the plastic bumpers if your vehicle is re-painted and placed in a high heat waxing booth. High temperatures could damage the bumpers.

Cleaning the interior

The upholstery may be easily cleaned with a mild soap or detergent and water solution.

First vacuum over upholstery to remove loose dirt. Then, using a sponge or soft cloth, apply the soap solution to the upholstery. After allowing it to soak in for a few minutes to loosen the dirt, remove the dirt and wipe off the soap with a clean damp cloth. If all the dirt does not come off, repeat the procedure. Commercial foaming-type upholstery cleaners are also available which work well. Follow the manufacturer's instructions.

NOTICE:

Do not use solvent, thinners, petrol or window cleaner on the interior.

Use a good foam-type shampoo to clean the carpets.

Begin by vacuuming thoroughly to remove as much dirt as possible. Several types of foam cleaners are available; some are in aerosol cans and others are powders or liquids which you mix with water to produce a foam. To shampoo the carpets, use a sponge or brush to apply the foam and rub in overlapping circles. Do not apply water. The best results are obtained by keeping the carpet as dry as possible. Read the shampoo instructions and follow them closely.

continued overleaf

The seat belts may be cleaned with mild soap and water or with lukewarm water.

Use a cloth or sponge. As you are cleaning, check the belts for excessive wear, fraying, or cuts.

NOTICE:

Do not use dye or bleach on the belts. Doing so may weaken them.

The windows may be cleaned with any household window cleaner.

NOTICE:

When cleaning the inside of the windows, be careful not to scratch or damage the heater wires on the rear window.

If you have questions about the cleaning of your Holden, your local Holden dealer will be pleased to answer them.

Part 6
MAINTENANCE REQUIREMENTS —

- Maintenance facts
- Does your vehicle need repairing?

Maintenance facts

HOLDEN WISE
QUALITY SERVICE & PARTS

Regular maintenance is essential.

We urge you to protect your new car investment by having it serviced properly and regularly. For guidance in this regard, there is a maintenance schedule in section B of this handbook. The handbook also contains service vouchers for presentation to your Holden Dealer when the car is due to be serviced.

Regular maintenance will aid:

- Good fuel economy.
- Long vehicle life.
- Driving enjoyment.
- Safety.
- Reliability.
- Warranty coverage.
- Compliance with government regulations.

Your Holden has been designed for economical driving and economical maintenance. Many formerly required maintenance items are no longer required or are not required as often. To ensure that your car runs at peak efficiency and lasts a long time, follow the maintenance schedule in section B of this handbook. For most people, the odometer reading will indicate when service is needed. If, however, you drive infrequently, your car should be serviced at least every 6 months, as shown on the schedule. Under severe driving conditions, more frequent maintenance is required.

Where to go for service

It is recommended that your car be taken to a Holden Dealer for servicing because it will be worked on by technicians who receive regular in-house training on Holden vehicles; as well as the latest factory service bulletins and technical information. Also your Holden Dealer has invested in many high quality precision Holden tools so that service and repair work can be carried out quickly and efficiently, which ultimately could mean a cost saving to you.

What about do-it-yourself maintenance?

Many of the maintenance items are easy to do yourself if you have a little mechanical ability and a few basic automotive tools. These items are referred to in Part 7. Doing some of your own car maintenance will save you money.

Note, however, that some maintenance tasks require special tools and skills. These are best performed by qualified Holden technicians. If you plan on doing only simple maintenance items, your Holden Dealer will be pleased to perform the remaining service tasks.

If you are a skilled do-it-yourself mechanic, the Holden factory service manuals are recommended. Please be aware that do-it-yourself maintenance can affect your warranty coverage. See section B of this handbook for the details.

Does your vehicle need repairing?

Be on the alert for changes in performance, sounds and visual tip-offs that indicate service is needed. Some important clues are as follows:

- Engine missing, stumbling, or pinging.
- Appreciable loss of power.
- Strange engine noises.
- A leak under the vehicle (however, water dripping from the air conditioner after use is normal).
- Change in exhaust sound (this may indicate a dangerous carbon monoxide leak — drive with the windows open and have the exhaust system checked immediately).
- Flat-looking tyre; excessive tyre squeal when cornering; uneven tyre wear.
- Vehicle pulls to one side when driving straight on a level road.
- Strange noises related to suspension movement.
- Loss of brake effectiveness; spongy feeling brake or clutch pedal; pedal almost touches floor; vehicle pulls to one side when braking.
- Engine temperature continually higher than normal.
- Engine continually runs hot; oil pressure stays low.

If you notice any of these clues, take your vehicle to your Holden dealer as soon as possible. It probably needs adjustment or repair.

CAUTION:

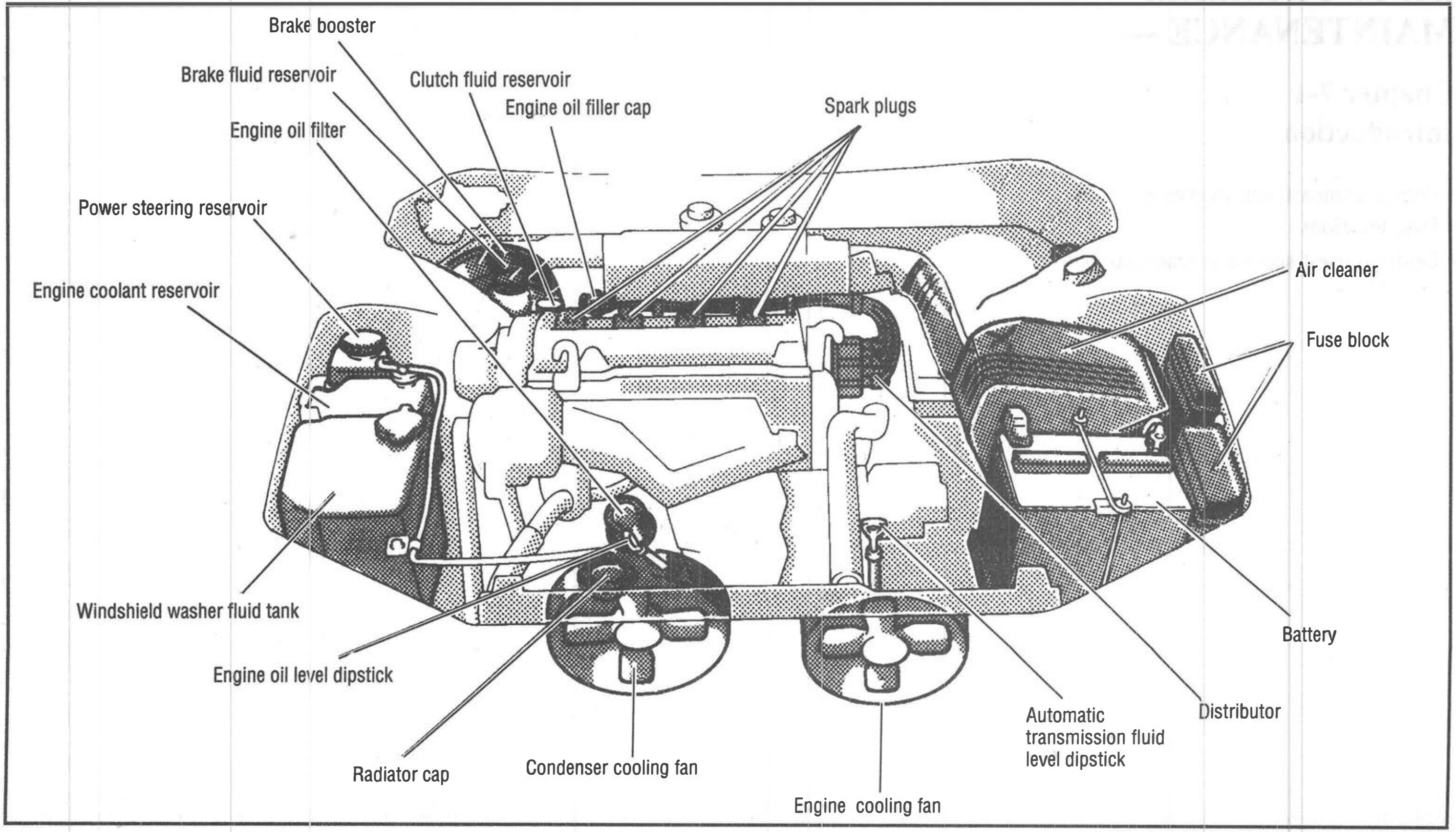
Do not continue driving with the vehicle unchecked. It could result in serious vehicle damage and possibly personal injury.

Part 7
DO-IT-YOURSELF MAINTENANCE —

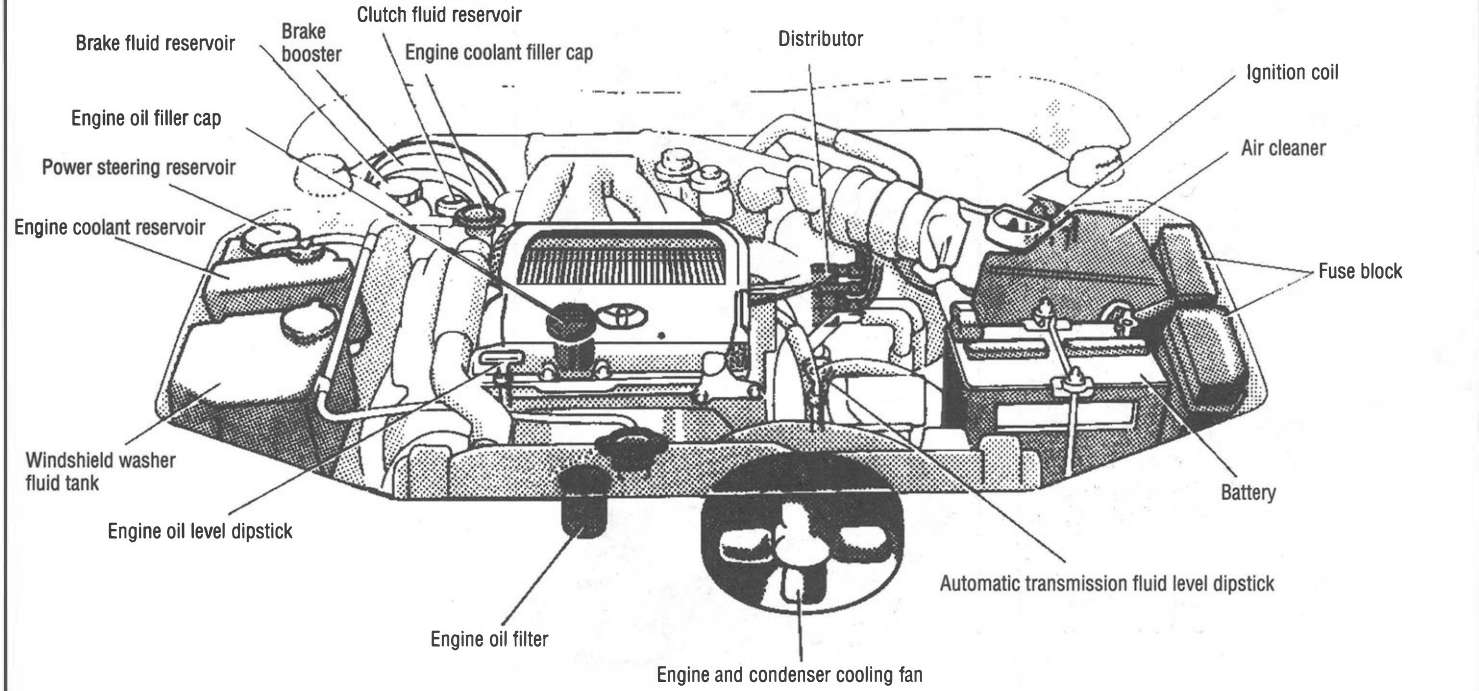
Chapter 7-1
Introduction

- Engine compartment overview
- Fuse locations
- Do-it-yourself service precautions

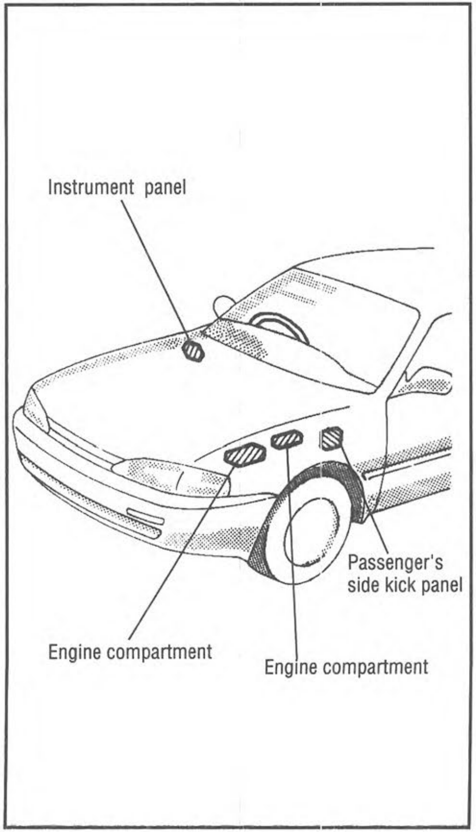
Engine compartment overview (5S-FE engine)

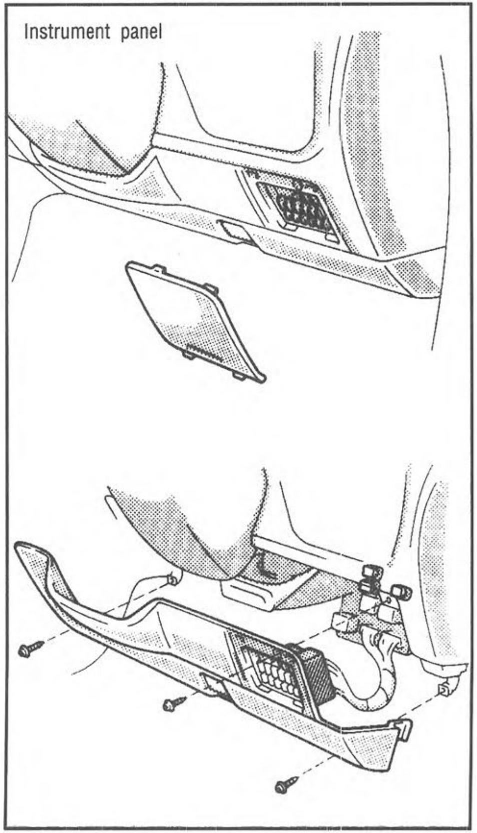

Brake booster
Brake fluid reservoir
Clutch fluid reservoir
Engine oil filler cap
Spark plugs
Engine oil filter
Power steering reservoir
Engine coolant reservoir
Air cleaner
Fuse block
Windshield washer fluid tank
Battery
Engine oil level dipstick
Automatic transmission fluid level dipstick
Distributor
Radiator cap
Condenser cooling fan
Engine cooling fan

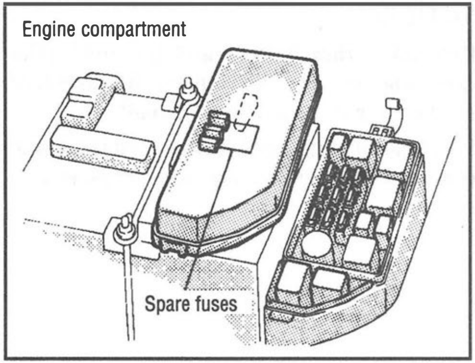
Engine compartment overview (3VZ-FE engine)

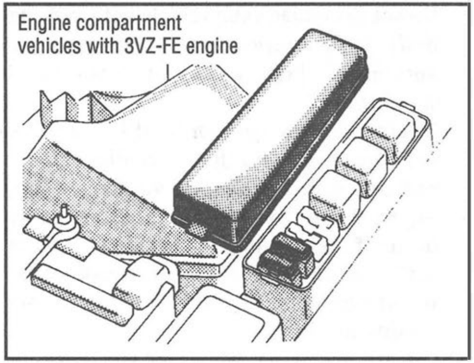

Clutch fluid reservoir
Brake fluid reservoir
Brake booster
Engine coolant filler cap
Distributor
Ignition coil
Engine oil filler cap
Air cleaner
Power steering reservoir
Engine coolant reservoir
Fuse block
Windshield washer fluid tank
Battery
Engine oil level dipstick
Automatic transmission fluid level dipstick
Engine oil filter
Engine and condenser cooling fan

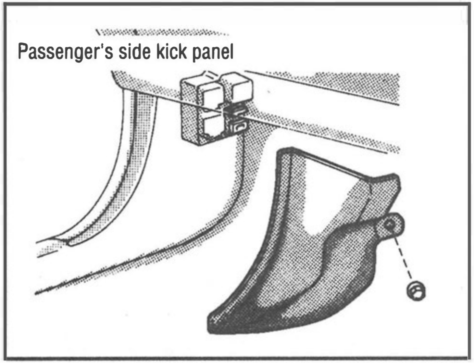
Fuse locations

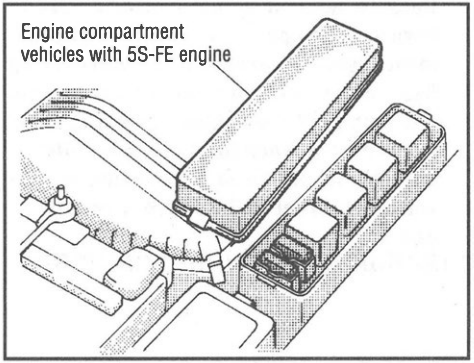

Instrument panel
Passenger's side kick panel
Engine compartment
Engine compartment


Instrument panel


Engine compartment


Engine compartment vehicles with 3VZ-FE engine


Passenger's side kick panel


Engine compartment vehicles with 5S-FE engine

Do-it-yourself service precautions

If you perform maintenance by yourself, be sure to follow the correct procedure given in this part.

You should be aware that improper or incomplete servicing may result in operating problems.

This part gives instructions only for those items that are relatively easy for an owner to perform. As explained in Part 6, there are still a number of items that must be done by a qualified technician with special tools.

Utmost care should be taken when working on your vehicle to prevent accidental injury. Here are a few precautions that you should be especially careful to observe:

CAUTION:

- **When the engine is running, keep hands, clothing and tools away from the moving fan and engine drive belts. (Removing rings, watches and ties is advisable).**
- **Immediately after driving, the engine, radiator and exhaust manifold will be hot, so be careful not to touch them. Oil and fluid may also be hot.**
- **Do not smoke, cause sparks or allow open flames around fuel or battery. The fumes are flammable.**
- **Be extremely cautious when working on the battery. It contains poisonous and corrosive sulphuric acid.**
- **Do not get under your vehicle with just the body jack supporting it. Always use automotive jack stands or other solid supports.**
- **Be sure that the ignition is off if you work near the engine and electric cooling fans or radiator grille. With the ignition on, the engine cooling fan may automatically start to run if the engine coolant temperature is sufficiently high. The condenser cooling fan will also automatically start to run if the air conditioner is on.**
- **Use eye protection whenever you work on or under your vehicle where you may be exposed to flying or falling material, fluid spray, etc.**
- **Because ignition systems form a certain hazard to any person contacting live parts in the engine compartment, persons wearing heart pacemakers are advised not to be in the vicinity of the engine while it is being worked on or when the ignition is switched on. They could be affected when certain voltage, current and frequency conditions exist.**

NOTICE:

Remember that battery and ignition cables carry high currents or voltages. Be careful of accidentally causing a short circuit.

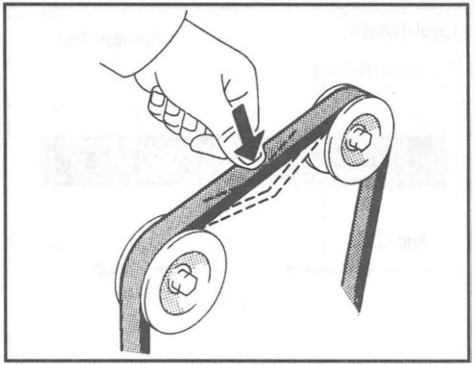
When closing the engine hood, check to see that you have not forgotten any tools, rags, etc.

Part 7
DO-IT-YOURSELF MAINTENANCE —

Chapter 7-2
Engine and Chassis

- Checking the engine drive belts
- Checking the engine oil level
- Changing the engine oil and filter
- Checking the engine coolant level
- Changing the engine coolant
- Checking and replacing the air cleaner element
- Replacing spark plugs
- Checking clutch pedal freeplay
- Checking brake and clutch fluid
- Checking brake pedal freeplay
- Checking brake pedal clearance
- Checking parking brake adjustment
- Checking the brake booster
- Checking power steering fluid
- Checking steering wheel freeplay
- Checking manual transmission oil
- Checking automatic transmission fluid
- Checking differential fluid
- Checking tyre pressure
- Checking and replacing tyres
- Rotating tyres
- Snow chains
- Replacing wheels

Checking the engine drive belts



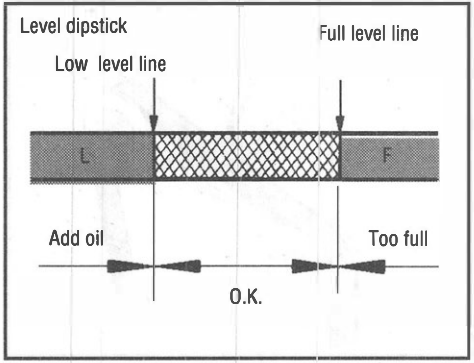
Visually inspect the condition of the belts. Check their tension by applying thumb pressure midway between the pulleys.

(a) With the engine turned off, check the belts for cracks, fraying, excessive wear or oil stains. Have belts in poor condition immediately replaced by your Holden dealer.

(b) With your thumb, press hard on each belt midway between the pulleys. Each belt should deflect no more than the amount specified in Part 8. If a belt is loose, have it adjusted by your Holden dealer.

CAUTION:
When the engine is hot, be careful not to touch the radiator or engine.

Checking the engine oil level



With the engine at operating temperature and turned off, check the oil level on the dipstick.

1. To get a true reading, the vehicle should be on a level spot. After turning off the engine, wait a few minutes for the oil to drain back into the bottom of the engine.

2. Pull out the dipstick and wipe it clean with a rag.

3. Re-insert the dipstick. Push it in as far as it will go, or the reading will not be correct.

4. Pull the dipstick out and look at the oil level on the end. If it is between the "F" and "L" marks, it is O.K.

CAUTION:

Be careful not to touch the hot exhaust manifold.

If the oil level is below or only slightly above the low level line, add engine oil of the same type as already in the engine.

Remove the oil filler cap and add engine oil in small quantities at a time, checking the dipstick.

The approximate quantity of oil needed to fill between the low level line and the full level line on the dipstick is indicated below for reference.

When the level reaches within the correct range, install the filler cap hand-tight.

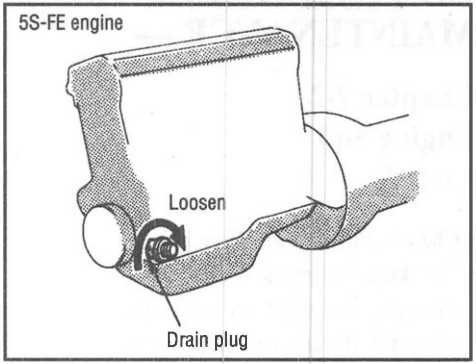
Oil quantity, L:

5S-FE engine	1.0
3VZ-FE engine	1.1

NOTICE:

Avoid overfilling, or the engine could be damaged.

Changing the engine oil and filter



1. Warm up the engine for a few minutes and then turn it off. Remove the oil filler cap.

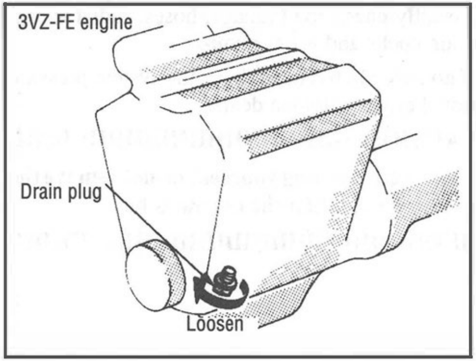
(a) Park the vehicle on a level spot. Warm up the engine until the engine temperature gauge shows a rise (warm oil will drain faster and more thoroughly). Turn the engine off.

(b) Remove the oil filler cap. This allows air to enter the engine as the oil drains.

2. Remove the drain plug and allow the oil to drain fully.

(a) Place a drain pan under the drain plug.

(b) Using a wrench, remove the drain plug. Allow the oil to drain fully.



CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

The oil may be hot — be careful not to burn yourself.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

3. Remove the old oil filter. Install a new one. Reinstall the drain plug.

(a) Using an oil filter wrench (any of several common types will work), loosen the oil filter. It turns counter clockwise. Once loose, you may unscrew it the rest of the way by hand. When removing it, hold up the end so that oil does not spill out.

(b) With a clean rag, wipe off the mounting surface on the engine so that the new filter will seat well. Make sure that the old gasket has not stuck to the mounting surface. If it has, remove it before installing the new filter.

(c) Smear a little engine oil on the rubber gasket of the new oil filter.

(d) Screw the new oil filter into place and tighten it until the gasket contacts the seat. Then give it an additional 3/4 turn to seat the filter.

(e) Re-install the drain plug and a new gasket. Tighten the plug with your wrench, but do not force it and strip the threads.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Be careful not to touch the hot exhaust manifold.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

4. Add oil and install the filler cap. Start the engine and check for leaks at the filter or drain plug.

(a) See "Engine oil selection" for proper oil selection. Engine oil additives are neither needed nor, recommended.

(b) After adding the oil, make sure that the filler cap is installed hand-tight. You should double-check the oil level on the dipstick.

(c) With the engine running, look carefully for any small leaks from around the oil filter or drain plug. Any leak indicates a faulty installation.

(d) Turn the engine off and wait a few minutes. Check the oil level again and add oil if necessary.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

- **Used engine oil contains potentially harmful contaminants which may cause skin disorders such as inflammation or skin cancer, so care should be taken to avoid prolonged and repeated contact with it. To remove used engine oil from your skin, wash thoroughly with soap and water.**
- **Do not leave used oil within the reach of children.**
- **Dispose of used oil and filter only in a safe and acceptable manner. Do not dispose of used oil and filter in household trash, in sewers or onto the ground. Call your dealer or a service station for information concerning recycling or disposal.**

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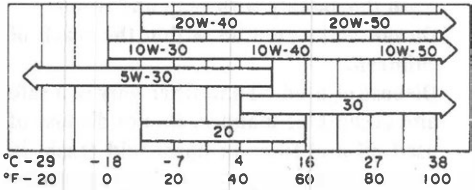
continued overleaf

Engine oil selection

Use engine oil of the API grade SG or better. If it is impossible to obtain grade SG or better, grade SF may be used. Determine the viscosity for your climate. Recommended viscosity is given in the chart below.

Recommended viscosity (SAE):



Temperature range anticipated before next oil change

Checking the engine coolant level (5S-FE engine)

Look at the see-through coolant reservoir. The coolant level is satisfactory if it is between the "FULL" and "LOW" lines on the reservoir. If the level is low, add coolant of the same type as already in the system.

The radiator cap should also be removed from time to time when the engine is cold to inspect the coolant level.

NOTICE:

The level of coolant in the see-through reservoir does not always indicate the correct content of the system. If the engine is overheating or there has been a sudden loss of coolant, remove the radiator cap once the engine has cooled down and check the coolant level. The radiator must always be full to the top of the filler neck. Refer to "If your car overheats" in Part 4 for further information.

The coolant level in the reservoir will vary with engine temperature. However, if the level is on or below the "LOW" line, add coolant. Bring the level up to the "FULL" line.

Always use the same type of coolant as already in the cooling system. For information on coolant, see also "Changing the engine coolant".

If the coolant level drops within a short time after replenishing, there may be a leak in the system. Visually check the radiator, hoses, radiator cap, drain cocks and water pump.

If no leak can be found, have the system pressure tested at your Holden dealer.

CAUTION:

To prevent burning yourself, do not remove the radiator cap when the engine is hot.

Checking the engine coolant level (3VZ-FE engine)

Look at the see-through coolant reservoir. The coolant level is satisfactory if it is between the “FULL” and “LOW” lines on the reservoir. If the level is low, add coolant of the same type as already in the system.

The coolant filler cap should also be removed from time to time when the engine is cold to inspect the coolant level.

NOTICE:

The level of coolant in the see-through reservoir does not always indicate the correct content of the system. If the engine is overheating or there has been a sudden loss of coolant, remove the coolant filler cap once the engine has cooled down and check the coolant level. The cooling system must always be full to the top of the filler neck. Refer to “If your car overheats” in Part 4 for further information.

The coolant level in the reservoir will vary with engine temperature. However, if the level is on or below the “LOW” line, add coolant. Bring the level up to the “FULL” line.

Always use the same type of coolant as already in the cooling system. For information on coolant, see also “Changing the engine coolant”.

If the coolant level drops within a short time after replenishing, there may be a leak in the system. Visually check the radiator, hoses, engine coolant filler cap, drain cocks and water pump.

If no leak can be found, have the system pressure tested at your Holden dealer.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

To prevent burning yourself, do not remove the coolant filler cap when the engine is hot.

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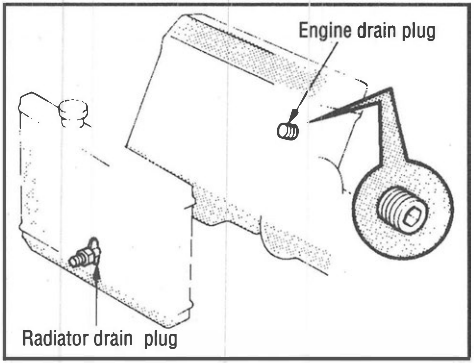
Changing the engine coolant (5S-FE engine)



Drain the cooling system and flush it out with water in accordance with the maintenance schedule given in section B of this Handbook.

To ensure the cooling system does not contain an air lock which could damage the engine after it has been refilled with coolant, it is essential that the draining, flushing and refilling procedure given below, be followed carefully. Should you feel that the procedure is too difficult for your to do, your Holden Dealer will be pleased to do it for you.

Draining procedure

1. Park the vehicle on a level spot where the coolant can drain into a suitable disposal container.

2. Ensure the engine is cool.

3. Move heater temperature control to the full heat position.

4. Remove radiator cap.

5. Open radiator drain plug.

6. Open engine drain plug.

7. Allow coolant to drain completely.

Flushing Procedure

8. Insert mains pressure water supply hose into radiator through the filler neck.

9. Flush radiator until clear water flows from the radiator drain.

10. Close radiator drain plug.

11. Continue flushing until clear water runs from engine drain.

12. Close water supply and securely tighten engine drain plug.

Refilling Procedure

13. Disconnect heater hose at heater tap neck and support open end at a level above opposite connected end.

14. Pour the correct amount of Holden approved coolant into the radiator.

NOTICE:

The use of Holden approved coolant is essential when replacing the coolant. The chemical composition of the coolant is the product of extensive research and development and has been designed specifically to provide maximum protection for your engine and associated components. Therefore, it must always be added when renewing engine coolant and never mixed with any other additive or antifreeze. See "Engine coolant type selection" this chapter and "Winter driving tips" in Part 4 for further information.

15. Add clean demineralised or distilled water to the radiator until water escapes from the heater hose.

16. Reconnect heater hose using new hose clamp. Ensure hose is engaged fully onto heater tap neck.

17. Refill radiator to top of filler neck and ensure the coolant reservoir is showing full.

NOTICE:

If you spill some of the coolant, be sure to wash it off with water to prevent it from damaging parts or paint.

Add only clean demineralised or distilled water together with Holden approved coolant to fill the radiator.

Check procedure

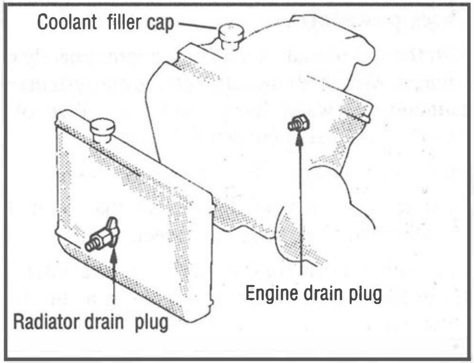
Start the engine and let it idle for approximately 6 minutes. Whilst idling, add clean water to the radiator to maintain full water level condition. Turn off engine and reinstall radiator cap.

Check the cooling system for water leaks.

Road test the vehicle to confirm that normal operating temperature is not exceeded.

Stop engine and, taking care not to touch anything hot in the engine compartment, check again for water leaks.

Changing the engine coolant (3VZ-FE engine)



Drain the cooling system and flush it out with water in accordance with the maintenance schedule given in section B of this Handbook.

To ensure the cooling system does not contain an air lock which could damage the engine after it has been refilled with coolant, it is essential that the draining, flushing and refilling procedure given below, be followed carefully. Should you feel that the procedure is too difficult for you to do, your Holden Dealer will be pleased to do it for you.

Draining procedure

1. Park the vehicle on a level spot where the coolant can drain into a suitable disposal container.

2. Ensure the engine is cool.

3. Move heater temperature control to the full heat position.

4. Remove coolant filler cap.

5. Remove the top radiator hose from the radiator.

6. Open radiator drain plug.

7. Open engine drain plug.

8. Allow coolant to drain completely.

Flushing Procedure

9. Insert mains pressure water supply hose into radiator inlet.

10. Flush radiator until clear water flows from the radiator drain.

11. Close water supply.

12. Insert mains pressure water supply hose into engine coolant filler neck.

13. Flush engine until clear water flows from the engine drain.

14. Close water supply.

15. Securely tighten radiator and engine drain plugs.

16. Reinstall radiator top hose onto radiator using a new hose clamp.

Refilling procedure

17. Pour the correct amount of Holden approved coolant into the coolant filler. Then slowly fill with clean demineralised or distilled water until the coolant reaches the top of the filler neck.

continued overleaf

Wait for a few minutes and add water in small quantities until the water level does not drop.

Ensure coolant reservoir is showing full.

NOTICE:

The use of Holden approved coolant is essential when replacing the coolant. The chemical composition of the coolant is the product of extensive research and development and has been designed specifically to provide maximum protection for your engine and associated components. Therefore, it must always be added when renewing engine coolant and never mixed with any other additive or antifreeze. See "Engine coolant type selection" this chapter and "Winter driving tips" in Part 4 for further information.

NOTICE:

If you spill some of the coolant, be sure to wash it off with water to prevent it from damaging parts or paint.

Add only clean demineralised or distilled water together with Holden approved coolant to fill the cooling system.

Check procedure

Start the engine and let it idle for approximately 6 minutes. Whilst idling, add water to the system to maintain full water level condition. Turn off engine and reinstall coolant filler cap.

Check the cooling system for water leaks.

Road test the vehicle to confirm that normal operating temperature is not exceeded.

Stop engine and, taking care not to touch anything hot in the engine compartment, check again for water leaks.

Engine coolant type selection

Your engine cooling system must contain ethylene-glycol based antifreeze containing anticorrosive.

Ethylene-glycol antifreeze coolant containing anticorrosive is the type of coolant your new Holden was delivered with. In addition to providing antifreeze protection to about - 14 degrees Celsius and preventing subsequent damage to the engine as a result of freezing, the coolant also protects the engine cooling system from corrosion.

The use of Holden approved coolant is essential when replacing the coolant. The Holden coolant's chemical composition is the product of extensive research and development and has been designed to provide maximum protection for your engine and associated components when replaced in correct proportions in accordance with the vehicle maintenance schedule. When replacing coolant, it is essential that all existing coolant be thoroughly flushed from the system (includes engine radiator, heater and hoses) and Holden approved coolant added together with clean demineralised or distilled water. See "Changing the engine coolant" this chapter. Holden approved coolant must be used to provide maximum protection.

For information on coolant specifications, refer to Part 8.

NOTICE:

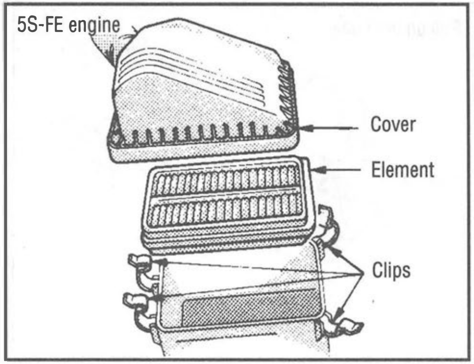
To prevent possible harm to the engine, the mixing of the Holden product with any other additive or antifreeze must not occur.

Use only clean demineralised or distilled water to fill the cooling system.

Do not use alcohol type antifreeze or plain water alone.

Whenever coolant is replaced, the system must be thoroughly flushed as described in "Changing the engine coolant" in this chapter.

Checking and replacing the air cleaner element



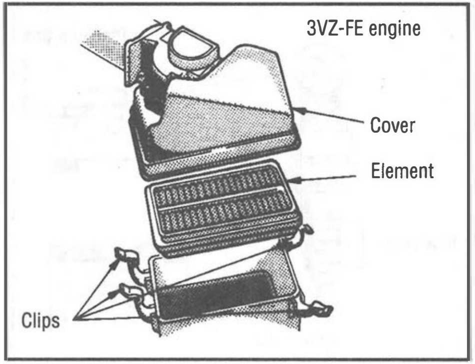
To inspect the element, release the clips, remove the cover and take out the element.

Inspect the lower surface of the element. If it is dirty, it should be replaced. If it is just moderately dusty, it may be cleaned by blowing low pressure compressed air from the upper surface. Do not wash or oil the element.

When installing an element, be sure to remove any dust from where the element seats and put the element properly in place.

NOTICE:

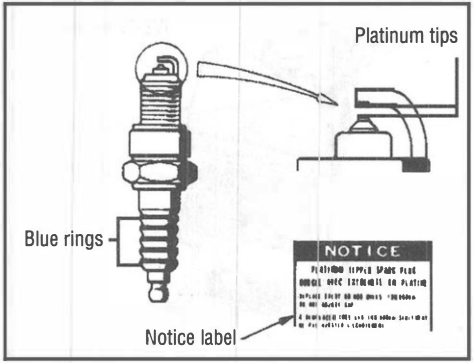
Do not drive with the air cleaner removed or excessive engine wear could result. Also, backfiring could cause a fire in the engine compartment.



NOTICE:

When lifting the cover, ensure that none of the emission control hoses or electrical connectors are disconnected.

Replacing spark plugs (5S-FE engine)

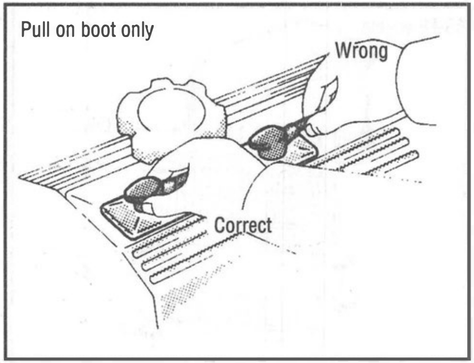


Your engine uses platinum-tipped spark plugs which do not require replacement as frequently as the conventional type. The spark plugs should be replaced at regular intervals in accordance with the maintenance schedule outlined in section B of this handbook.

The platinum-tipped spark plugs are identified by blue rings on the ceramic. They will last much longer than the conventional type.

NOTICE:

Do not reuse the platinum-tipped spark plugs by cleaning or regapping.



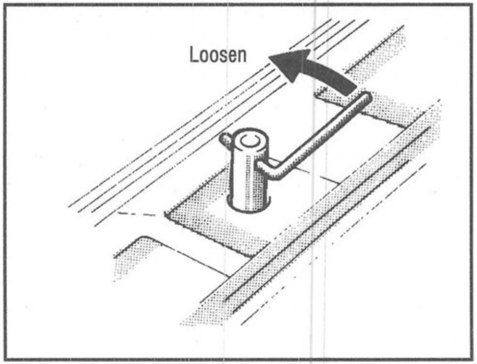
1. Unfasten the spark plug cables by pulling on the boot, not on the cable itself.

a. Note the order of the spark plug cables. If you are not positive that you can reconnect them correctly, mark each cable with a number on a piece of tape before disconnecting it.

b. Unfasten the connector by pulling straight up. Pulling on the cables may break the carbon conductor inside.

CAUTION:

The boots may be hot, so be careful.



2. Unscrew the old spark plugs with a spark plug wrench and remove them.

CAUTION:

The spark plugs may be hot, so be careful.

NOTICE:

Do not allow dirt or anything else to fall through the spark plug holes.

3. Install new spark plugs and reconnect the spark plug cables in the correct order.

(a) Screw in the new plugs by hand as far as they will go. If necessary, a spark plug wrench may be used for an extension. If a plug does not screw in smoothly, remove it and try again to ensure correct thread engagement. This will prevent the threads from stripping.

(b) Tighten the plugs with a spark plug wrench. Do not over-tighten.

(c) Make sure the cables are installed in the correct order. The connector fastens on by pushing it squarely over the end of the plug.

Spark plug selection

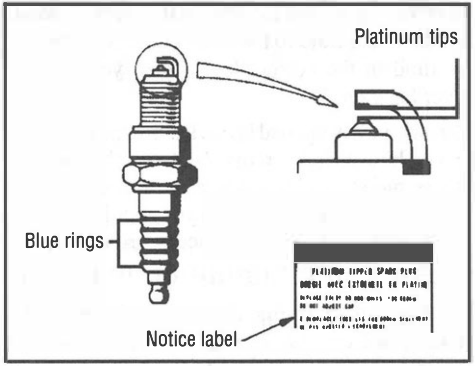
Always use the spark plugs recommended below or equivalent.

NIPPONDENSO	PK20R11
NGK	BKR6EP-11

NOTICE:

Use only the spark plugs of the type specified above. Using other types will cause engine damage, loss of performance or radio noises.

Replacing spark plugs (3VZ-FE engine)

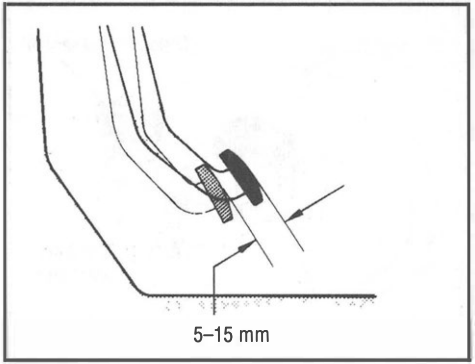


Your engine uses platinum-tipped spark plugs which do not require replacement as frequently as the conventional type. The spark plugs should be replaced at regular intervals in accordance with the maintenance schedule outlined in section B of this handbook.

When the spark plugs need to be replaced, have them replaced by a qualified technician.

The platinum-tipped spark plugs are identified by blue rings on the ceramic. They will last much longer than the conventional type.

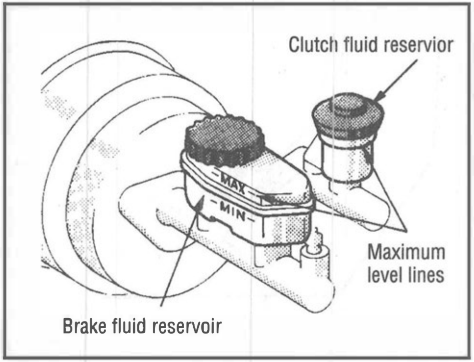
Checking clutch pedal freeplay



Press down lightly on the clutch pedal and measure the distance it moves freely before the clutch resistance is felt. The freeplay should be within the above limits.

If the freeplay is more or less, have your Holden dealer inspect the clutch.

Checking brake and clutch fluid



To check the fluid levels, simply look at the see-through reservoirs. The brake and clutch fluid levels should be within 10 and 5 mm respectively below each maximum level line.

It is a good habit to check these fluid reservoirs every time you check the engine oil level.

It is normal for the brake fluid level to go down slightly as the brake pads wear. So be sure to keep the reservoirs filled.

If any reservoir needs frequent refilling, it may indicate a serious mechanical problem.

If the level is low, add SAE J1703 or FMVSS No. 116 DOT 3 brake fluid to the brake or clutch reservoir.

Remove and replace the reservoir covers by hand. Fill the brake fluid to the dotted line. This brings the fluid to the correct level when you put the cover back on.

Use only newly opened brake fluid. Once opened, brake fluid absorbs moisture from the air and excess moisture can cause a dangerous loss of braking. Also, for this reason you should have the brake fluid drained and replaced periodically.

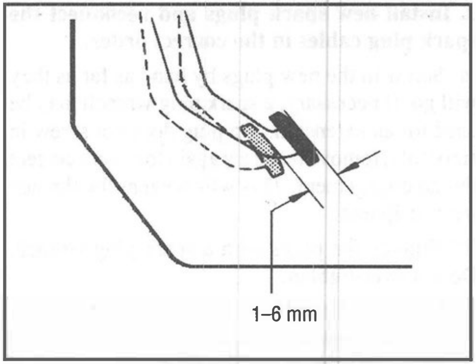
CAUTION:

Use caution in filling the reservoirs because brake fluid can harm your eyes and damage painted surfaces. If fluid gets in your eyes, flush your eyes with clean water.

NOTICE:

If you spill some of the fluid, be sure to wash it off with water to prevent it from damaging parts or paint.

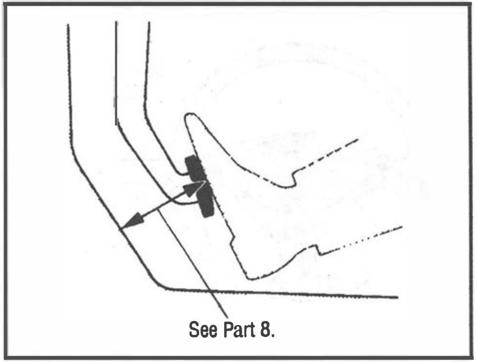
Checking brake pedal freeplay



With the engine stopped, first reduce the vacuum in the booster by depressing the brake pedal several times. Then lightly and slowly press down on the pedal with your fingers and measure the distance it moves before slight resistance is felt.

If the freeplay is more or less than specification, have your Holden dealer adjust the brakes.

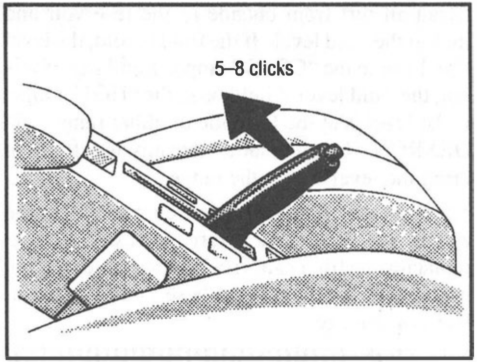
Checking brake pedal clearance



With the engine running, have someone press the brake pedal several times and then press hard on it. The distance from the asphalt sheet to the top surface of the pedal should not be less than specified in Part 8.

If the clearance is less, have your Holden dealer adjust the brakes.

Checking parking brake adjustment



Count the number of clicks as you slowly pull on the parking brake as far as it will go. The adjustment is correct if you hear the number of clicks specified above.

If you count more or less clicks, have the parking brake adjusted by your Holden dealer.

Checking the brake booster

Sit in the driver's seat and follow the instructions given below. If your brakes do not operate as described, have them checked at your Holden dealer.

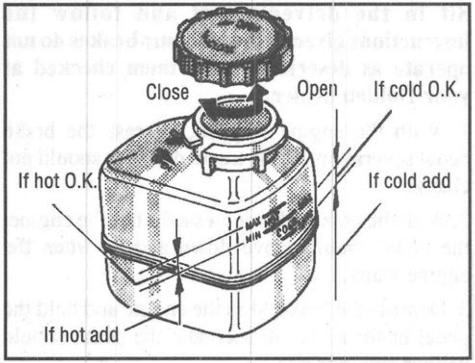
1. With the engine stopped, depress the brake pedal several times, the travel distance should not change.

2. With the brake fully depressed, start the engine: the pedal should move down a little when the engine starts.

3. Depress the brake, stop the engine and hold the pedal in for about 30 seconds: the pedal should neither sink nor rise.

4. Restart the engine, run it for about a minute and turn it off. Then firmly depress the brake several times: the pedal travel should decrease with each application.

Checking power steering fluid



Check the fluid level through the reservoir. If necessary, add DEXRON®-11 automatic transmission fluid.

If the vehicle has been driven around 80 km/h for 20 minutes (a little more in frigid temperatures), the fluid is hot (60°C - 80°C). You may also check the level when the fluid is cold (about room temperature, 10°C - 30°C) if the engine has not been run for about five hours.

Clean all dirt from outside of the reservoir and look at the fluid level. If the fluid is cold, the level should be in the "COLD" range. Similarly, if it is hot, the fluid level should be in the "HOT" range. If the level is at the low side of either range, add DEXRON®-11 automatic transmission fluid to bring the level within the range.

To remove the filler cap, turn it counter clockwise and lift up. To reinstall it, turn it clockwise. After replacing the filler cap, visually check the steering box case, vane pump and hose connections for leaks or damage.

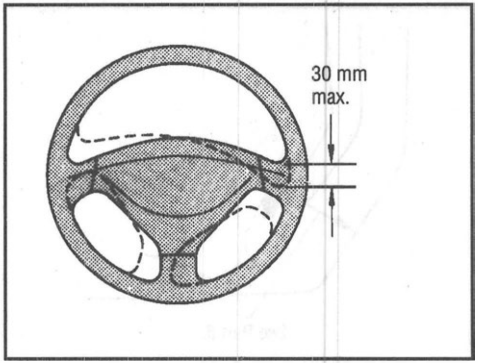
CAUTION:

The reservoir may be hot so be careful not to burn yourself.

NOTICE:

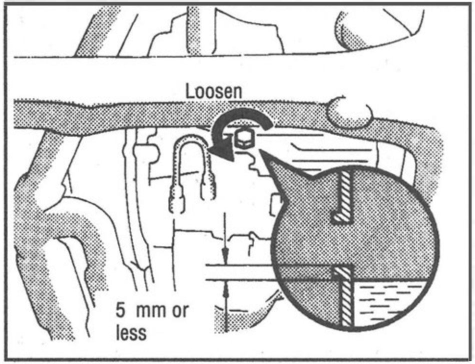
Avoid overfilling, or the power steering could be damaged.

Checking steering wheel freeplay



With the vehicle stopped and the front wheels pointing straight ahead, turn the steering wheel lightly to both sides. If the freeplay is more than specified, have it inspected by your Holden dealer.

Checking manual transmission oil



Remove the filler plug and feel inside the hole with your finger. The oil level should be no more than 5 mm below the bottom edge of the hole. If the level is correct, reinstall the plug and tighten it.

a. Make sure the vehicle is level while making this check.

b. After installing the plug, visually check the transmission for leaks or damage.

If the level is low, there may be a leak in the system. Have your vehicle checked by your Holden dealer as soon as possible.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Immediately after driving the oil may be hot, so be careful.

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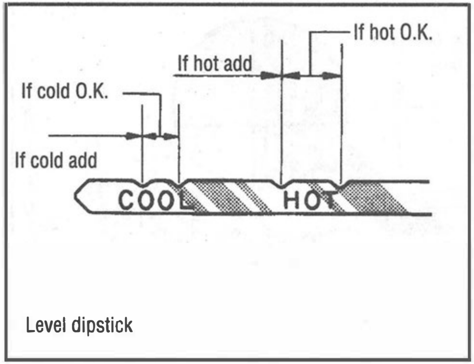
Checking automatic transmission fluid



1. Check the fluid level when the transmission is hot (normal operating temperature).

If the vehicle has been driven over 16 km (24 km in frigid temperatures) and the fluid temperature is 70°C - 80°C, the transmission is hot.

If the vehicle has just been driven for a long time at high speed or in city traffic in hot weather, or if the vehicle has been pulling a trailer, an accurate fluid level cannot be obtained. Check the level after the fluid has cooled down (about 30 minutes).

You may check the level when the transmission is cold. If the vehicle has not been driven for over five hours and the fluid is about room temperature 20°C - 30°C, the transmission is cold. However, checking a cold transmission is to be used for your reference only and the transmission must be checked again for correct level at normal operating temperature.

2. With the vehicle level, first set the parking brake and then start the engine. While the engine is idling, depress the brake pedal and shift the selector lever into each range from "P" to "L" and return to "P". With the engine still idling, check the fluid level and condition on the dipstick.

a. Pull out the dipstick and wipe it clean.

b. Re-insert the dipstick and push it in as far as it will go.

c. Pull the dipstick out and look at the fluid level. If the transmission is hot, the fluid level should be in the "HOT range on the dipstick. Similarly, if it is cold, the level should be in the "COOL" range.

d. While checking the fluid level, also check the condition. If the fluid is black or if it smells burnt, have it changed.

continued overleaf

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

- **When the engine is running, keep hands and clothing away from the moving fan and engine drive belts.**
- **Be careful not to touch the hot exhaust manifold.**

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

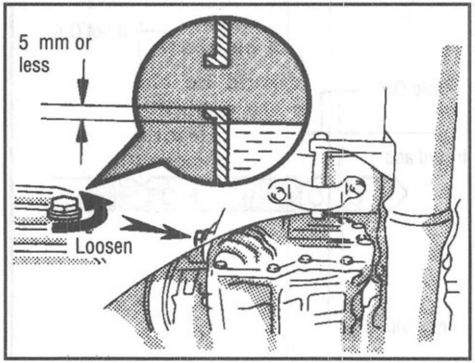
3. If the level is low, add DEXRON®-11 automatic transmission fluid.

If the level is at the low side of either range, add DEXRON®-11 automatic transmission fluid to bring the level within the range. (Fluid is added through the dipstick tube, using a funnel.)

NOTICE:

Avoid overfilling, or the transmission could be damaged.

Checking differential fluid (vehicles with automatic transmission)



Remove the filler plug and feel inside the hole with your finger. The fluid level should be no more than 5 mm below the bottom edge of the hole. If the level is correct, reinstall the plug and tighten it.

a. Make sure the vehicle is parked on a level spot.

b. After installing the plug, visually check the differential and axle for leaks or damage.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Immediately after driving the fluid may be hot, so be careful

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

If the level is low, add DEXRON®-II automatic transmission fluid until it begins to run out of the filler hole.

Re-install the plug and tighten it.

Checking tyre pressure

Keep your tyre pressures at the proper level.

The recommended cold tyre pressures and sizes are shown on the tyre plaque located on the front right "B" pillar below the door lock.

You should check the tyre pressures every two weeks, or at least once a month. And don't forget the spare!

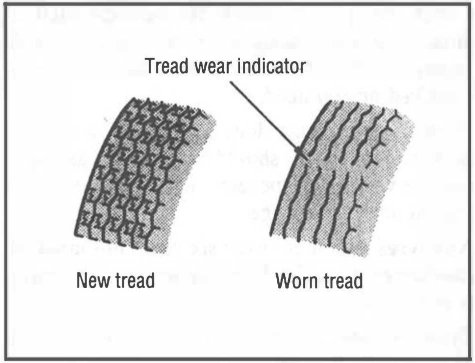
Incorrect tyre pressure can reduce tyre life and make your vehicle less safe to drive. Low tyre pressure results in excessive wear, poor handling, reduced fuel economy and the possibility of blowouts from overheated tyres. Also, low tyre pressure can cause poor sealing of the tyre bead. If the tyre pressure is excessively low, there is the possibility of wheel deformation and/or tyre separation.

High tyre pressure produces a harsh ride, handling problems, excessive wear at the centre of the tyre tread and a greater possibility of tyre damage from road hazards. If a tyre frequently needs inflating, have it checked by your Holden Dealer.

The following instructions for checking tyre pressure should be observed:

- **The pressure should be checked only when the tyres are cold.** If your vehicle has been parked for at least 3 hours and has not been driven for more than 1.5 km since, you will get an accurate cold tyre pressure reading.
- **Always use a tyre pressure gauge.** The appearance of a tyre can be misleading. Besides, tyre pressures that are even just a few kilopascals (kPa) off the specified pressure can degrade handling and ride.
- **Do not bleed or reduce tyre pressure after driving.** It is normal for the tyre pressure to be higher after driving.
- **Be sure to reinstall the tyre inflation valve caps.** Without the valve caps, dirt or moisture could get into the valve core and cause air leakage. If the caps have been lost, have new ones put on as soon as possible

Checking and replacing tyres



Checking your tyres

Check the tyre tread for the tread wear indicators. If the indicators show, replace the tyres.

The tyres on your Holden have built-in tread wear indicators to help you know when the tyres need replacement. When the tread depth wears to 1.6 mm or less, the indicators will appear. If you can see the indicators in two or more adjacent grooves, the tyre should be replaced. The lower the tread, the higher the risk of skidding.

continued overleaf

Check the tyres regularly for damage such as cuts, splits and cracks. If any damage is found, consult with a technician and have the tyre repaired or replaced.

Even if the damage does not appear serious, a qualified technician should examine the damage. Objects which have penetrated the tyre may have caused internal damage.

Any tyres which are over six years old must be checked by a qualified technician even if damage is not obvious.

Tyres deteriorate with age even if they have never or seldom been used.

This also applies to the spare tyre and tyres stored for future use.

Replacing your tyres

When replacing a tyre, use only the same size and construction as originally installed and with the same or greater load capacity.

Using any other size or type of tyre may seriously affect handling, ride, speedometer/odometer calibration, ground clearance and clearance between the body and tyres or snow chains.

CAUTION:

Do not mix radial, bias belted, or bias-ply tyres on your vehicle. It can cause dangerous handling characteristics, resulting in loss of control.

Never use second-hand tyres on your Holden.

Using tyres whose previous history is unknown is a risk.

Holden recommends all four tyres, or at least both of the front or rear tyres, be replaced at a time as a set.

See "If you have a flat tyre", Part 4, for tyre change procedure.

When a tyre is replaced, the wheel should always be balanced.

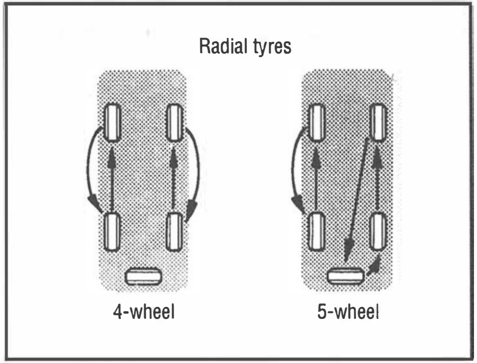
An unbalanced wheel may affect vehicle handling and tyre life. Wheels can get out of balance with regular use and should therefore be balanced occasionally.

When replacing a tubeless tyre, the air valve should also be replaced with a new one.

If you need to replace the tyres due to wear or damage, the following precautions should be observed when installing the tyre on the wheel.

- Lubricate wheel and beads with soapy water or tyre mounting lubricant.
- To properly seat tyre on rim, inflate tyre to a maximum of 310 kPa.
- Adjust inflation to recommended pressure.

Rotating tyres



To equalize the wear of your tyres, rotate the tyres every 10000 km.

Including the spare tyre in your rotation will help your tyres to last longer.

See "If you have a flat tyre", Part 4, for tyre change procedure.

When rotating tyres, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tyre pressure, improper wheel alignment, out-of-balance wheels or severe braking.

Snow Chains

Regulations regarding the use of snow chains vary according to state or type of road, so always check them before installing chains.

To prevent chain damage to your car:

1. Install the chains as tightly as possible and re-tighten them after driving about 500 metres.
2. Do not exceed 50 km/h, or the chain manufacturer's recommended speed limit.
3. Drive carefully avoiding bumps, holes, and sharp turns which may cause the vehicle to bounce.
4. Follow the instructions of the chain manufacturer.

Replacing wheels

When to replace your wheels

If you have wheel damage such as bends, cracks or heavy corrosion, the wheel should be replaced.

If you fail to replace damaged wheels, the tyre may slip off the wheel or they may cause loss of handling control.

Wheel selection

When replacing wheels, care should be taken to ensure that the wheels are replaced by ones with the same load capacity, diameter, rim width and offset.

Correct replacement wheels are available at your Holden Dealer.

A wheel of a different size or type may adversely affect handling, wheel and bearing life, brake cooling, speedometer/odometer calibration, stopping ability, headlight aim, bumper height, vehicle ground clearance and tyre or snow chain clearance to the body and chassis.

Replacement with used wheels is not recommended as they may have been subjected to rough treatment or high mileage and could fail without warning. Also, bent wheels which have been straightened may have structural damage and therefore should not be used. Never use an inner tube in a leaking wheel which is designed for a tubeless tyre.

Part 7
DO-IT-YOURSELF MAINTENANCE —

Chapter 7-3
Electrical components

- Checking battery condition and fluid level
- Battery recharging precautions
- Checking and replacing fuses
- Replacing the wiper blades
- Adding washer fluid
- Replacing semi-sealed beam headlight bulbs
- Replacing light bulbs

Checking battery condition and fluid level

CAUTION:

BATTERY PRECAUTIONS

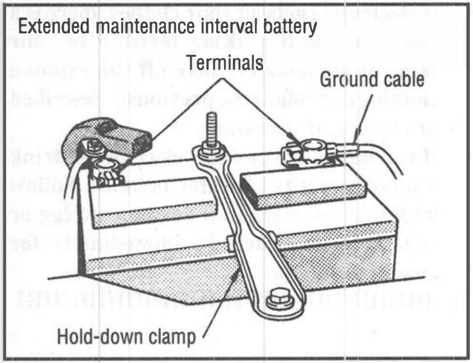
The battery produces an inflammable and explosive hydrogen gas.

- **Do not cause a spark from or near the battery with tools.**
- **Do not smoke or light a match near the battery.**
- **The electrolyte contains poisonous and corrosive sulphuric acid.**
- **Avoid contact with eyes, skin or clothes.**
- **Never ingest electrolyte.**
- **Wear protective safety glasses when working on or near the battery.**
- **Keep children away from the battery.**

EMERGENCY MEASURES

- **If electrolyte gets in your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while enroute to the medical office.**
- **If electrolyte gets on your skin, thoroughly wash the contacted area. If you feel pain or burn, get medical attention immediately.**
- **If electrolyte gets on your clothes, there is a possibility of it soaking through to your skin, so immediately take off the exposed clothing and follow the previously described procedure, if necessary.**
- **If you happen to swallow electrolyte, drink a large quantity of water or milk. Follow with milk of magnesia, beaten raw egg or vegetable oil. Then go immediately for emergency help.**

continued overleaf


Extended maintenance interval battery
Terminals
Ground cable
Hold-down clamp

1. Check the battery for corroded or loose connections, cracks or loose hold-down clamps.

(a) If the battery is corroded, wash it off with a solution of warm water and baking soda. Coat the outside of the terminals with grease to prevent further corrosion.

(b) If the connections are loose, tighten the clamp bolts, but do not over-tighten.

(c) Tighten the hold-down clamp only enough to keep the battery firmly in place. Over-tightening may damage the battery case.

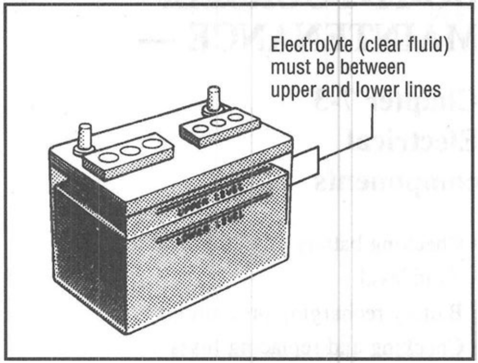
NOTICE:

Be sure the engine and all accessories are off before performing maintenance.

Remove the ground cable first and reinstall it last.

Be careful not to cause a short circuit with tools.

On batteries other than extended maintenance interval types, take care that no solution gets into the battery when washing.


Electrolyte (clear fluid) must be between upper and lower lines

2. Check the electrolyte level as shown above. If the level is low, add distilled water.

(a) When checking the electrolyte level, look at all six cells, not just one or two.

(b) Remove the filler/vent caps and replenish the battery with distilled water.

(c) After replenishing, be sure to securely retighten the filler/vent caps.

NOTICE:

Do not overfill the battery or the electrolyte may squirt out of the battery during periods of heavy charging causing corrosion or damage.

Battery recharging precautions

During recharging, the battery is producing hydrogen gas.

Therefore, before recharging:

1. Remove the filler/vent caps if performing a quick charge (6 A or above but max. 15 A). Removing the filler/vent caps is not necessary when performing a slow charge (under 5 A).

2. Be sure the power switch on the recharger is off when connecting the charger cables to the battery and when disconnecting them.

3. If recharging with the battery installed on the vehicle, be sure to disconnect the ground cable.

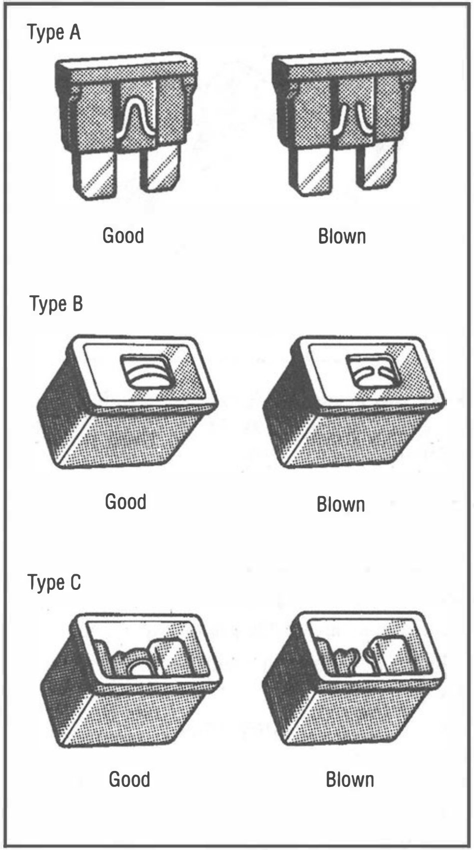
CAUTION:

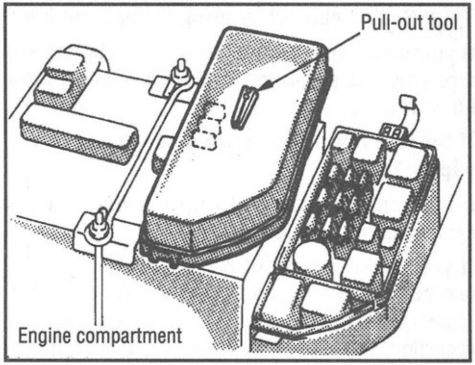
Always charge the battery in an unconfined area. Do not charge the battery in a garage or closed room where there is not sufficient ventilation.

NOTICE:

Never recharge the battery while the engine is running. Also, be sure all accessories are turned off.

Checking and replacing fuses





If the headlights or other electrical components do not work, check the fuses. If any of the fuses are blown, they must be replaced.

See "Fuse locations" in Chapter 7-1 for locations of the fuses.

Turn the ignition switch and inoperative component off. Pull a suspected fuse straight out and check it.

Determine which fuse may be causing the problem. The lid of the fuse box shows the name of the circuit for each fuse. See Part 8 of this manual for the functions controlled by each circuit.

continued overleaf

Type A fuses pull out by using the pull-out tool.

If you are not sure whether the fuse has blown, try replacing the suspected fuse with one that you know is good.

If the fuse has blown, push a new fuse into the clip.

Install only a fuse with an amperage rating designated on the fuse box lid.

If you cannot use one of the same amperage, use one that is lower, but as close as possible to the same rating. If the amperage is lower than that specified, the fuse might blow out again but this does not indicate anything wrong. Be sure to get a correct fuse as soon as possible and return the substitute to its original clip.

It is a good idea to purchase a set of spare fuses and keep them in your vehicle for emergencies.

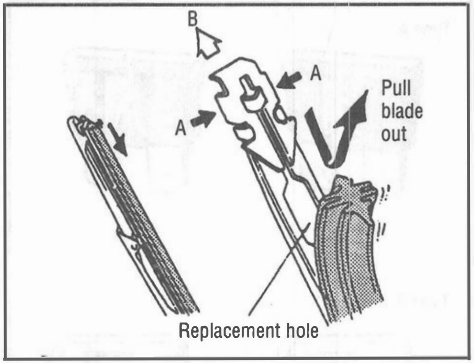
If the new fuse immediately blows out, there is a problem with the electrical system. Have your Toyota dealer correct it as soon as possible.

CAUTION: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Never use a fuse with a higher than specified amperage rating or any other object in place of a fuse. It may cause extensive damage and possibly fire.

IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

Replacing the front wiper blades



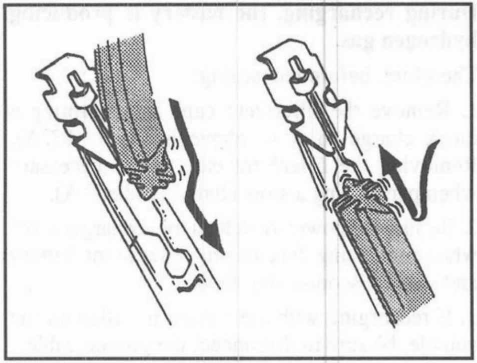
When the wipers no longer clean adequately, the wiper blades may be worn or cracked requiring replacement.

1. Lift the wiper blade clear off the windscreen by placing the arms in the "lock" back position.

2. Push the bottom end of the wiper rubber inward until it is free of the metal backing strip retaining clip and you can see the replacement hole.

3. Pull the wiper blade out of the replacement hole.

Note: If metal backing strip needs replacing, squeeze retaining clip at points 'A' and, whilst still squeezing, pull clip in direction of "B". The backing strip can then be removed.



4. To install a new rubber, insert the end of the rubber into the replacement hole and work the rubber along the slot in the blade backing strip.

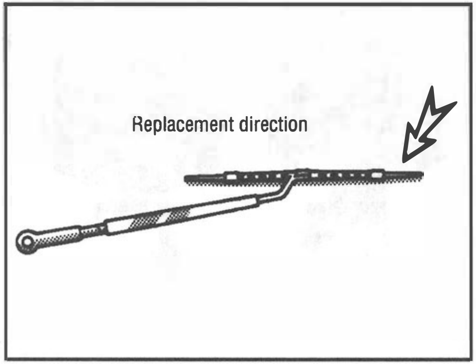
5. Once all of the rubber is in the frame slot, pull it over the backing strip retaining clip and spread the rubber evenly along the strip.

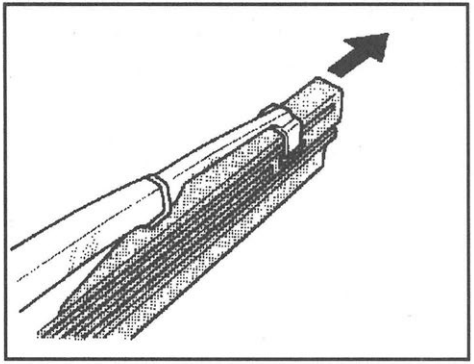
6. Fold the wiper arm back to the working position.

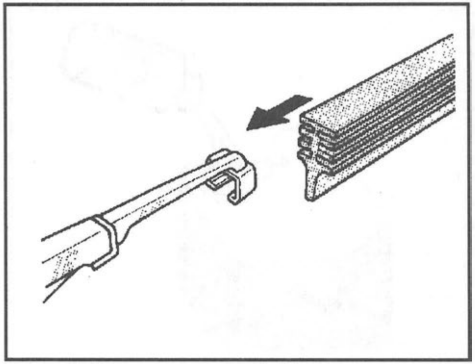
NOTICE:

Be careful not to scratch the glass surface with the wiper frame.

Replacing the rear wiper blades (station wagon)







When the wipers no longer clean adequately, the wiper blades may be worn or cracked requiring replacement.

1. Lift the wiper blades clear off the windscreen by placing the arms in the "lock-back" position.

2. Pull the rubber wiper blades out of the wiper frame from the replacement direction end.

3. Remove the steel rails from either side of the rubber and transfer them to the new rubber blades.

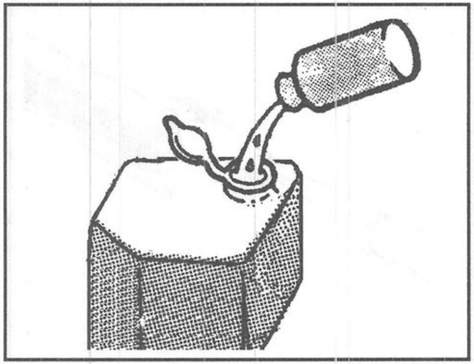
4. Insert the new rubber blade end without locating lugs into the end of the frame in the replacement direction indicated and work the rubber blade along the slot.

5. Fold the wiper arm back to the working position.

NOTICE:

Be careful not to scratch the glass surface with the wiper frame.

Adding washer fluid



If the windscreen washer does not operate, the windscreen washer tank could be empty. Check the tank and, if necessary, add washer fluid.

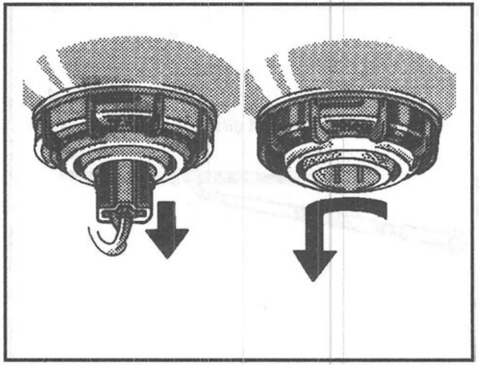
Tap water or clean rain water is a satisfactory washer fluid. However, if you drive during freezing conditions, the washer water might freeze. To ensure this does not occur, add a washer fluid that contains anti-freeze. Always read and follow the instructions given on the windscreen washer fluid container. Normal household detergents are not suitable as they may damage the washer pump and rubber wiper blade elements.

Check the washer jets regularly for cleanliness and alignment.

NOTICE:

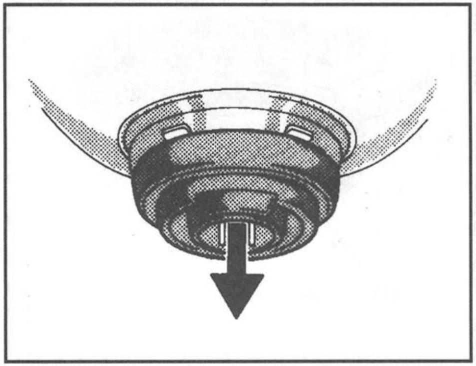
Do not use engine anti-freeze because it may damage the paintwork. Do not operate the windscreen wipers on a dry windscreen or scratching may result.

Replacing semi-sealed beam headlight bulbs

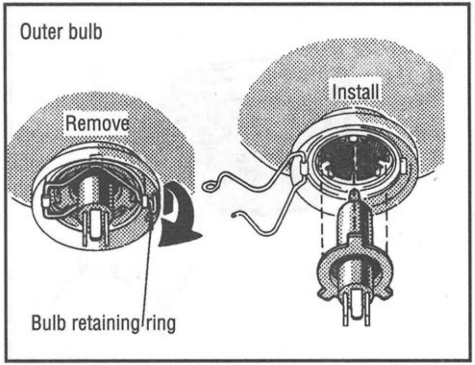


1. Turn off the ignition switch, headlight switch and open the hood. Unplug the connector. Turn the plastic cover counter clockwise and remove it.

If the connector is tight, wiggle it.



2.Remove the rubber cover.


Outer bulb
Remove
Install
Bulb retaining ring

3. Outer bulb: Release the bulb retaining spring and remove the bulb. Install a new bulb and the bulb retaining spring.

To install a bulb, align the tabs of the bulb with the cutout of the mounting hole.

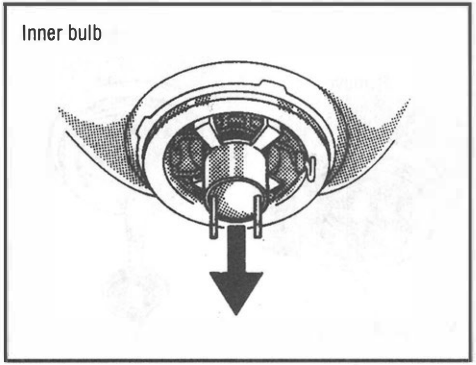
Bulb selection

Use a bulb with 60/55W (H4).

NOTICE:

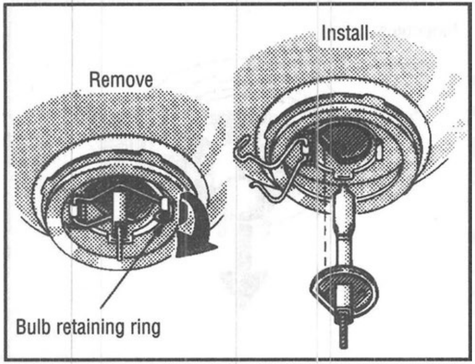
Use only a bulb of the type specified above.

Do not touch the glass part of the bulb with bare hands. If you do, clean the glass with alcohol and clean rag.



Inner bulb: Remove the socket.

continued overleaf



Release the bulb retaining spring and remove the bulb. Install a new bulb and the retaining spring. Insert the socket.

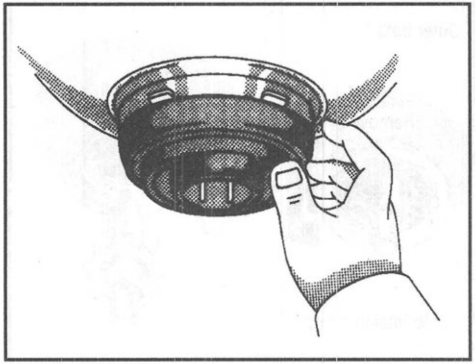
Bulb selection

Use a bulb with 55W.

NOTICE:

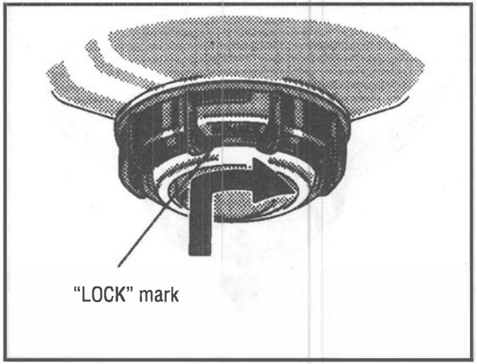
Use only a bulb of the type specified above.

Do not touch the glass part of the bulb with bare hands. If you do, clean the glass with alcohol and clean rag.



4. Install the rubber cover on the boss.

Make sure the rubber cover fits snugly on the connector and the headlight body.



5. Install the plastic cover with the "LOCK" mark upward and turn it clockwise. Insert the connector.

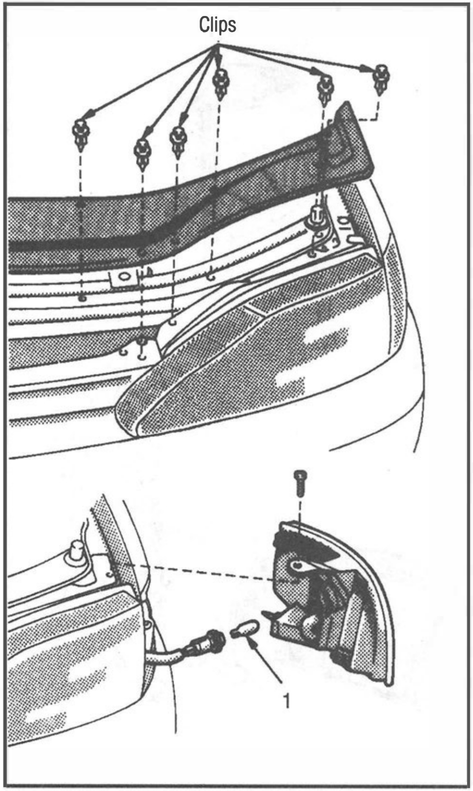
After replacement, have the headlight aim checked by your Holden dealer.

Replacing light bulbs

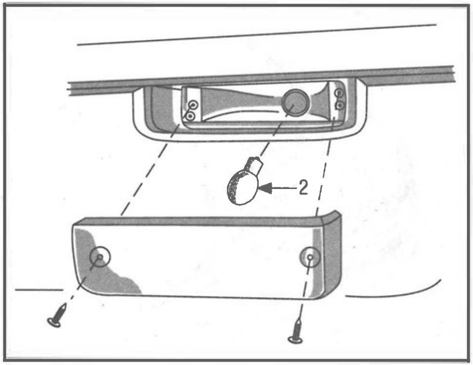
The illustrations show how to gain access to the bulbs. When replacing a bulb, make sure the light switch is off. Use only a bulb with the same wattage rating. The wattage ratings are given below.

The single end bulbs are removed by pressing in and turning counter clockwise. The double-end bulbs (*) or wedge base bulbs (**) pull straight out of the holder clips.

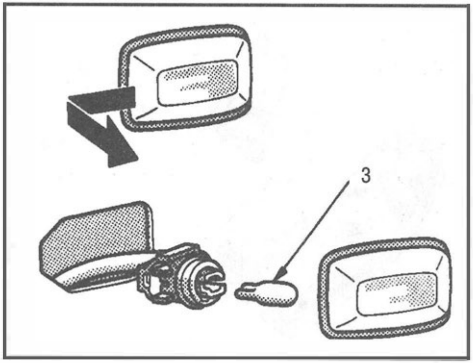
No.	Light Bulbs	Wattage
1	Parking lights**	5
2	Front turn signal lights	21
3	Side turn signal lights**	5
4	Rear turn signal lights	21
5	Stop and tail lights	21/5
6	Back-up lights	21
8	Licence plates lights**	5
9	Interior light*	8
11	Glovebox light**	1.2
12	Trunk room/luggage compartment light*	5
13	High mount stop light**	18



All models: Parking lights (for clip removal and replacement procedure, refer to end of this chapter)



All models: Front turn signal lights



All models: Side turn signal lights

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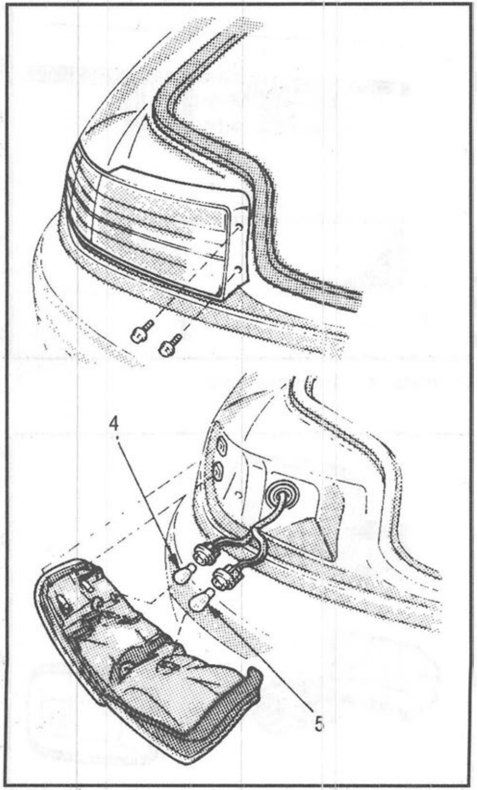
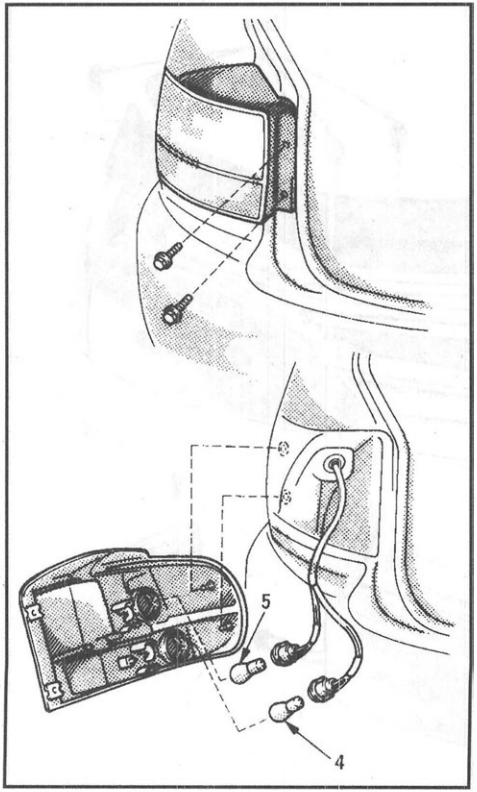
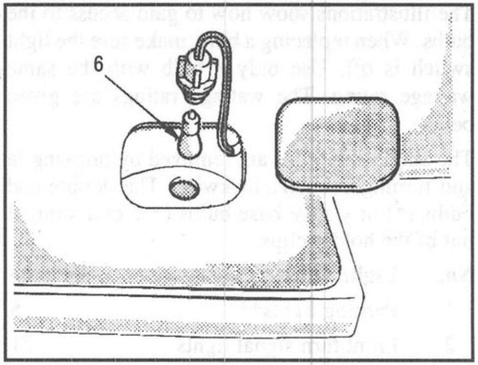


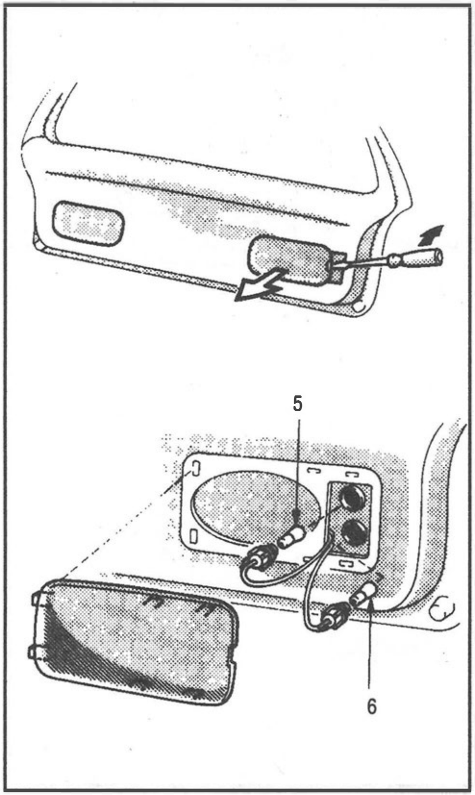
Sedan: Rear turn and stop/tail lights



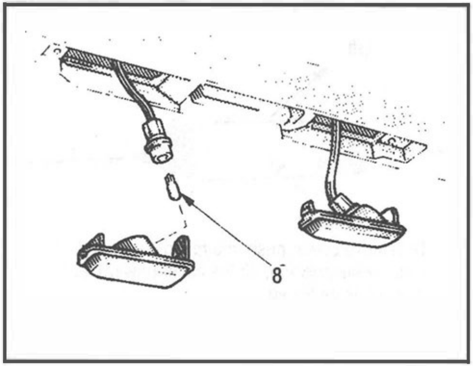
Wagon: Rear turn and stop/tail lights



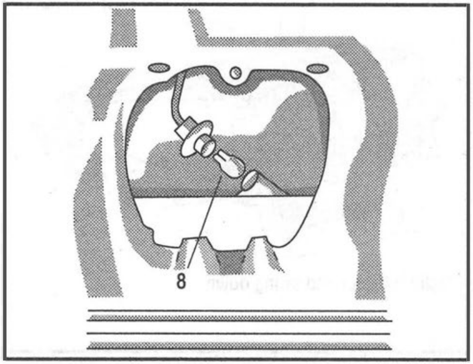
Sedan: Back-up lights



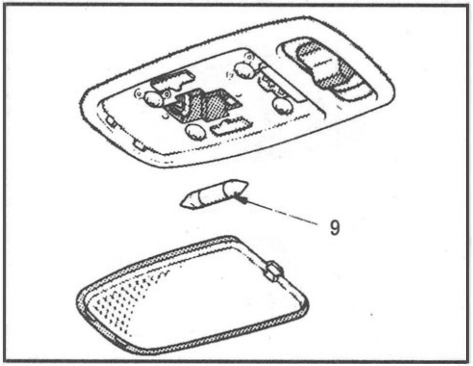
Wagon: Back-up and stop/tail lights



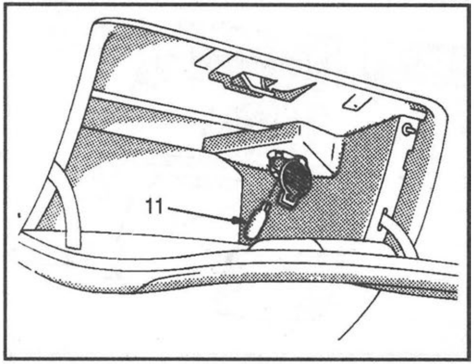
Wagon: Licence plate lights



Sedan: License plate lights



All models: Interior light



GS model: Glovebox light

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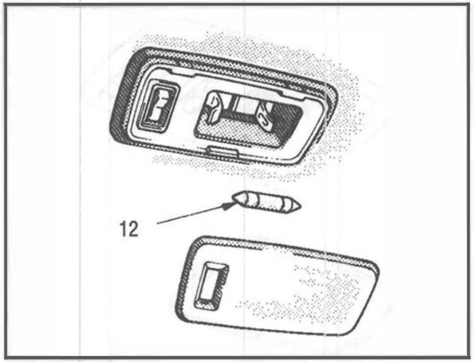
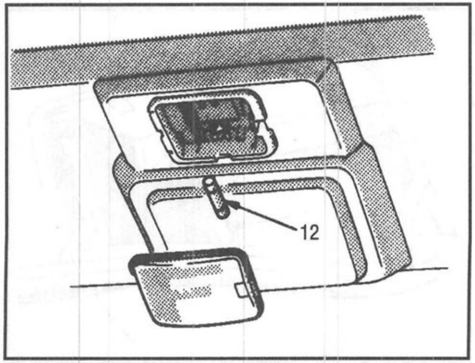
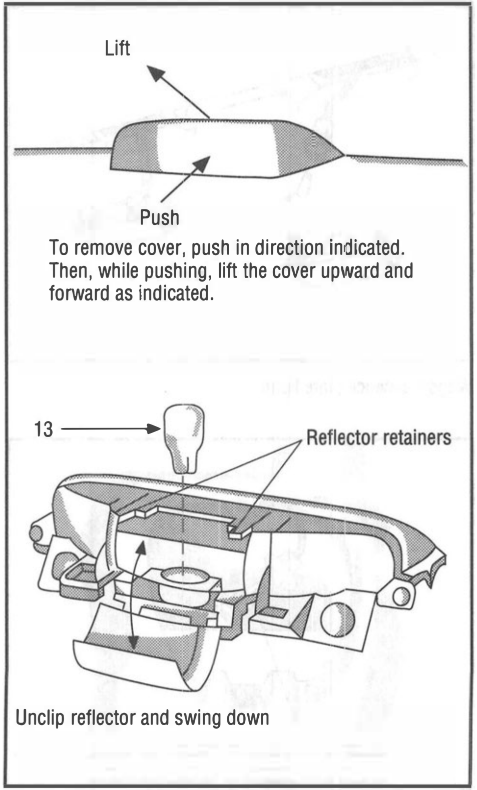


Wagon: Luggage compartment light



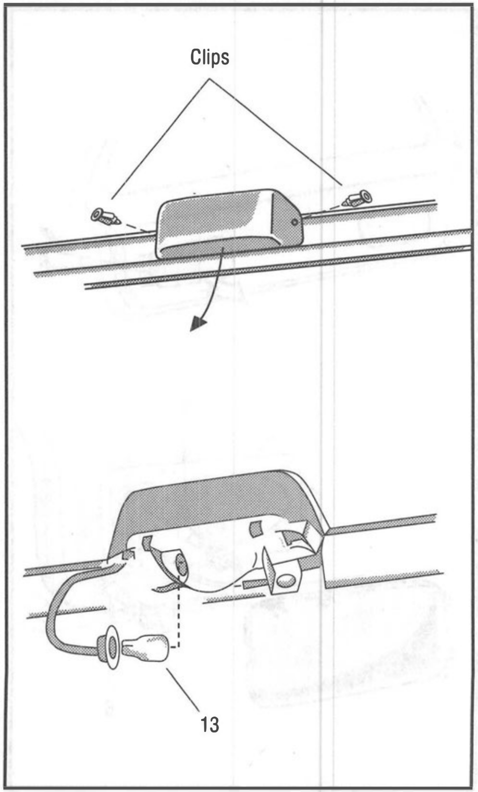
Sedan: Trunk room light


Lift
Push
13
Reflector retainers

To remove cover, push in direction indicated. Then, while pushing, lift the cover upward and forward as indicated.

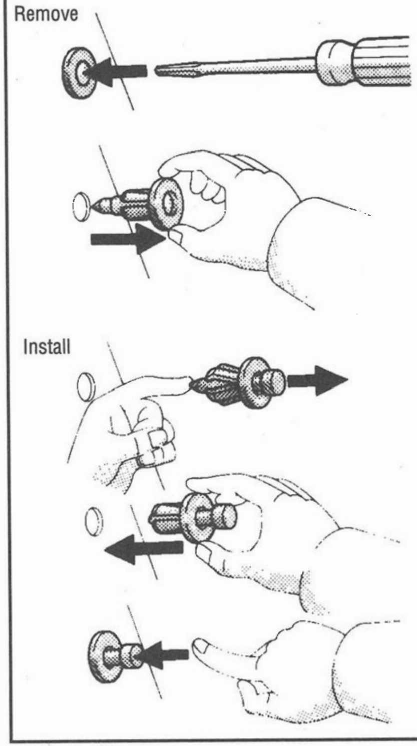
Unclip reflector and swing down

Sedan: High mount stop light



Wagon: High mount stop light (for clip removal and replacement procedure, refer to end of this chapter)

Removing and installing clips


Remove
Install

Part 8
SPECIFICATIONS —

- Dimensions
- Engine
- Fuel
- Service specifications
- Tyres
- Fuses

Dimensions

Sedan

Overall length	mm	4725
Overall width	mm	1770
Overall height	mm	1400
Wheelbase	mm	2620
Front track	mm	1550
Rear track	mm	1500

Wagon

Overall length	mm	4795
Overall width	mm	1770
Overall height	mm	1505
Wheelbase	mm	2620
Front track	mm	1550
Rear track	mm	1500

Engine

Models:

5S-FE and 3VZ-FE

Type:

5S-FE engine

4 cylinder in line, 4 cycle, petrol engine

3VZ-FE engine

6 clyinder V type, 4 cycle, petrol engine

Bore and stroke (mm):

5S-FE engine

87.0 X 91.0

3VZ-FE engine

87.5 X 82.0

Displacement, cm^3:

5S-FE engine	2164
3VZ-FE engine	2959

Fuel

Fuel type:

Unleaded petrol with the following octane number or higher (Research Octane Number).

5S-FE engine	91
3VZ-FE engine	91

Fuel tank capacity, 70L

Service specifications

ENGINE

Valve clearance (engine cold), mm:

5S-FE engine	
Intake	0.19-0.29
Exhaust	0.28-0.38
3VZ-FE engine	
Intake	0.13-0.23
Exhaust	0.27-0.37

Spark plug type:

5S-FE engine	
NIPPONDENSO	PK20R11
NGK	BKR6EP-11
3VZ-FE engine	
NIPPONDENSO	PQ2OR
NGK	BCPR6EP-11

Spark plug gap, mm: 1.1

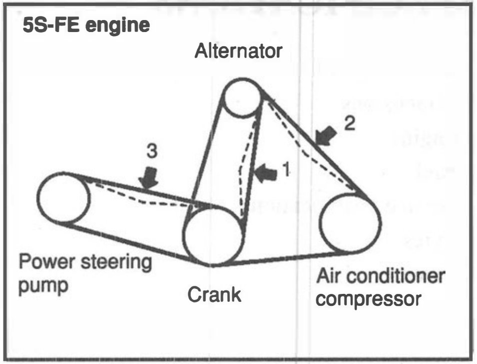
Drive belt deflection with 10 kg thumb pressure (used belt), mm

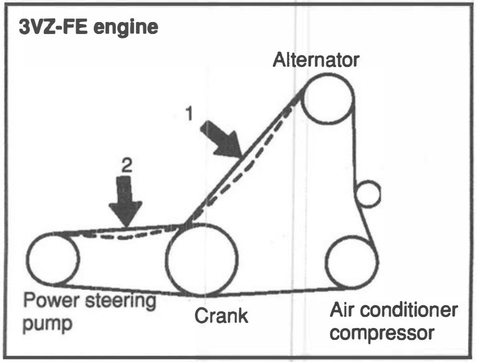
5S-FE engine

1. 13-17
2. 9-11
3. 10-13

3VZ-FE engine

1. 11-13.5
2. 10-12


5S-FE engine
Alternator
2
3
1
Power steering pump
Crank
Air conditioner compressor


3VZ-FE engine
Alternator
1
2
Power steering pump
Crank
Air conditioner compressor

Ignition timing:

10° BTDC

(with terminals E_1 - TE_1 of check connector connected)

ENGINE LUBRICATION

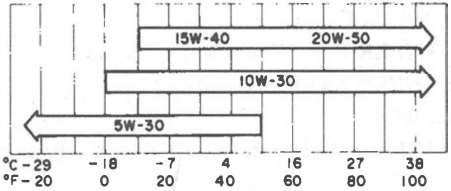
Oil capacity, L

5S-FE engine	
Dry fill	4.6
Drain and refill	
with filter	3.6
without filter	3.4
3VZ-FE engine	
Dry fill	5.1
Drain and refill	
with filter	4.3
without filter	4.1

Oil grade (API): SG or better.

If it is impossible to obtain grade SG or better, grade SF may be used.

Recommended oil viscosity (SAE):



Temperature range anticapated before next oil change

COOLING SYSTEM

Total capacity, L

5S-FE engine	
Manual transmission	6.5
Automatic transmission	6.6
3VZ-FE engine	8.9

Coolant type:

Holden approved coolant.

(ethylene-glycol type antifreeze, anticorrosive)

Concentration:

From pre-delivery inspection to the first coolant change (60,000 km or 36 months), maintain coolant concentration at 30% coolant and 70% clean demineralised or distilled water.

At first coolant change and subsequent changes, and for top up, maintain coolant concentration at 50% coolant and 50% clean demineralised or distilled water.

(Do not use alcohol type antifreeze.)

BATTERY

Specific gravity reading at 20°C

1.260	Fully charged
1.160	Half charged
1.060	Discharged

Charging rates:

Quick charge	15 A max.
Slow charge	5 A max.

CLUTCH

Pedal freeplay, mm:

5-15

Fluid type:

SAE J1703 or FMVSS No. 116 DOT 3

MANUAL TRANSMISSION

Oil capacity, L

5S-FE engine 2.6

Oil type:

5S-FE engine

Multipurpose gear oil API GL-3

(If it is impossible to get multipurpose gear oil API GL-3, you may use multipurpose gear oil API GL-4)

Recommended viscosity:

5S-FE engine

SAE 75W-90

AUTOMATIC TRANSMISSION

Fluid capacity, L

3VZ-FE engine	6.5
5S-FE engine	5.6

Fluid type:

Automatic transmission fluid DEXRON®-11

DIFFERENTIAL (automatic transmission)

Fluid capacity, L	
3VZ-FE engine	0.8
5S-FE engine	1.6

Fluid type:

Automatic transmission fluid DEXRON®-ll

BRAKES

Minimum pedal clearance when depressed, mm:

70

Pedal freeplay, mm:

1-6

Parking brake adjustment: 5-8 clicks

Fluid type: SAE J1703 or FMVSS No. 116

DOT 3

STEERING

Wheel freeplay:

Less than 30 mm

Power steering fluid type:

Automatic transmission fluid DEXRON®-11

Tyre size and pressure

Refer to the tyre plaque on the front right "B" pillar below the door lock.

Wheel nut torque, 103 Nm

Gross vehicle mass (G.V.M.) kg

Engine	Sedan	Wagon
5S-FE	1830	1935
3VZ-FE	1920	2120

Maximum towing loads

Trailer with brakes:

5S-FE engine 1100kg

3VZ-FE engine 1200 kg

Trailer without brakes: 500 kg

Tow ball vertical load: 80 kg

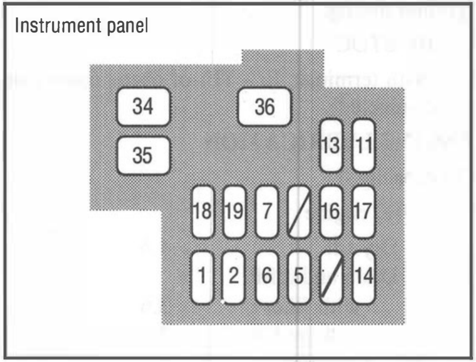
Note:

Tow ball load is specified under the following conditions and assumptions:

(a) No specified load equalisation device or towing coupling is used.

(b) That the tow ball vertical load when added to the loaded weight of the towing vehicle is not greater than the specified G.V.M. of the vehicle.

Fuses



Type A fuses

1. ECU-IG 15A: Electronically controlled automatic transmission system, anti-lock brake system

2. GAUGE 10A: Gauges and meters, back-up light, air conditioning control system, rear window defogger, warning lights, engine and ECT ECU

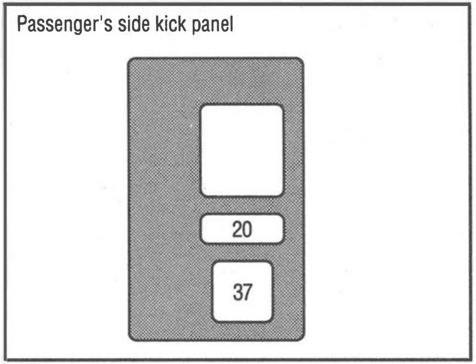
3. Not used

4. Not used

5. WIPER 20 A: Windshield wipers and washers

6. TURN 7.5 A: Turn signal lights and emergency flashers

7. IGN 7.5 A: Engine and ECT ECU, charging system



11. ECU-B 15 A: Anti-lock brake system, engine and ECT ECU

13. STOP 20 A: Stop lights, anti-lock brake system, engine and ECT ECU

14. CIG 15 A: Audio system, clock, cigarette lighter, auto antenna, exterior mirror

15. Not used

16. TAIL 15 A: Tail lights, parking lights, license plate lights, instrument panel light

17. Not used

18. SPARE: Spare fuse

19. SPARE: Spare fuse

20. A/C 10 A: Air conditioning control system

21. STARTER 10 A: Starter system, engine and ECT ECU

22. ALT-S 7.5 A: Charging system

23. EFI 15 A: Engine and ECT EUC, fuel pump

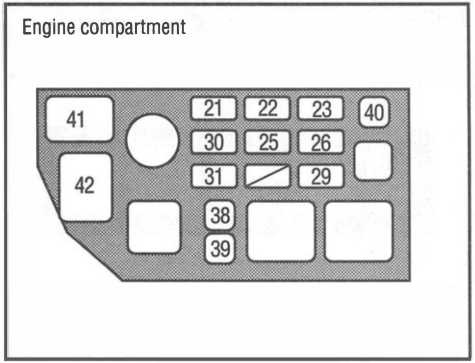
25. DOME 20 A: Audio system, interior light, clock, ignition switch light, personal light, trunk room light, auto antenna

26. HAZ-HORN 15 A: Turn signal lights, emergency flasher, horn

29. AM2 30 A: Igniter

30. HEAD (RH) 15 A: Right-hand headlight

31. HEAD (LH) 15 A: Left-hand headlight



Type B Fuses

34. P/W 30 A: Power door lock control system

35. DEFOG 40 A: Rear window defogger

36. AM1 40 A: Starting system, cigarette lighter, wipers, gauges, turning lights, engine ECT ECU

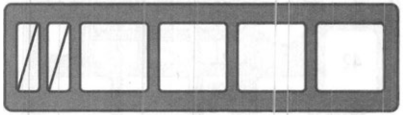
37. HTR 40 A: Air conditioning control system

38. CDS 30 A: Condenser cooling fan

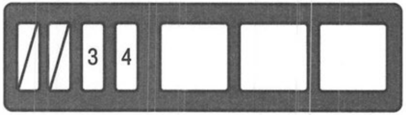
39. FAN 30 A: Radiator cooling fan

40. ST MAIN 30 A: Starting system, engine and ECT ECU

continued overleaf



Engine compartment (vehicles with 5S-FE engine)



Engine compartment (vehicles with 3VZ-FE engine)

Type C fuses

41. ALT 100 A: Charging system, stop lights, heater, defogger, anti-lock brake system

42. A.B.S. 60 A: Anti-lock brake system

SECTION B - Warranty and Maintenance

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NEW VEHICLE WARRANTY CERTIFICATE

General Motors - Holden's Automotive Ltd A.C.N. 006 893 232, hereinafter Holden's, warrants that it will make good without charge, any defect which appears in the vehicle identified in the vehicle identification certificate, found on the inside front cover of this handbook.

Provided, for the Vehicle Warranty

1. the defect has been notified to an authorised Holden Dealer or Service Dealer:
   (a) before the vehicle has travelled a distance of 50,000 km or,
   (b) within 24 months of the date of delivery of the vehicle to the first retail purchaser (or in the case of a demonstrator vehicle within 24 months of the date when it was first placed into service by the Dealer)

   whichever comes first,

   AND

   for the Powertrain Warranty

   the defect has been notified to an authorised Holden Dealer or Service Dealer:
   (c) before the vehicle has travelled a distance of 100,000 km or,
   (d) within 36 months of the date of delivery of the vehicle to the first retail purchaser (or in the case of a demonstrator vehicle within 36 months of the date when it was first placed into service by the Dealer)

   whichever comes first,

   AND

2. the vehicle has been returned to an authorised Holden Dealer or Service Dealer

   AND

   the Dealer has determined that the defect complained of is one of workmanship and is not caused by
   (a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc., or by neglect
   (b) operation of the vehicle after it is known to be defective
   (c) accident or deliberate act
   (d) atmospheric fallout or flood, hail, salt, etc.
   (e) failure to carry out proper maintenance service
   (f) use of incorrect types and grades of fuel, oil or lubricants
   (g) alteration or modification of the vehicle by any party not authorised by Holden's
   (h) the fitting of parts or accessories not marketed by Holden's
   (i) any work carried out on the vehicle by someone other than an authorised Holden Dealer or Service Dealer,

BY THE DEALER (or as otherwise decided by Holden's) MAKING GOOD THE DEFECT BY REPAIR OR, AT THE OPTION OF HOLDEN'S, BY REPLACEMENT.

NEW VEHICLE WARRANTY CERTIFICATE CONT.

Excluded from the 24/50 Vehicle Warranty are:

defects in tyres (these being warranted by their manufacturers), batteries (which are covered for 12 months) and services such as engine tuning, brake adjustment, replacement of air/oil/fuel filters, wiper rubbers etc, which are required as part of normal vehicle maintenance.

Covered by the 36/100 Powertrain Warranty are:

1. **ENGINE**
   a) **BASIC ENGINE ASSEMBLY**
   Intake manifold; exhaust manifold; super charger; turbo charger; intercooler; seals and gaskets; mountings; flywheel; E.F.I. components; carburettor/throttle body; fuel pump; injection pump; vacuum pump; injector nozzles; hoses and pipes for vacuum and EGR and PCV and fuel systems; fluid coupling; water pump.
   b) **EMISSION CONTROL**
   Air pump; air injection manifold; air suction manifold and valve; throttle positioner; modulator; catalytic converter; positive crank case ventilation system; air injection by air suction system; emission control system; exhaust gas recirculation system.
   c) **ENGINE RELATED COMPUTERS**
   Engine control computer; emission control computer; E.F.I. computer; sensors.
2. **TRANSMISSION**
   Transmission; transaxle; transfer case assembly; torque converter; transmission control computer; mountings; seals and gaskets.
3. **CLUTCH**
   Cover Assembly
4. **FRONT / REAR AXLE**
   Axle Housing, Drive Shaft, Constant Velocity Joint, Propeller Shaft, Axle Hub, Axle Shaft, Bearing, Hub Bolts, Nuts, Oil Seals.
5. **SAFETY RESTRAINT**
   Seat Belts, Sensor Switch, Air Bag, Computer.

Excluded from the 36/100 Powertrain Warranty (but included in the 24/50 Vehicle Warranty) are:

Radiator; heater core; shock absorbers; springs and suspension mounting components; exhaust system; ignition coil/module; distributor; alternator; starter motor; fuel tank; transmission external linkages; wheels; instrumentation switches; spark plug leads plus any other components not specifically listed in Powertrain components shown above.

This Warranty applies only to vehicles operated in Australia and is given to the person who is entitled to possession of the vehicle whether as owner, lessee or otherwise and is given in addition to all rights conferred by law on that person.
Owners of vehicles operated outside Australia should consult their local dealer regarding the warranty applicable to their vehicles.

HOLDEN'S PARTS AND ACCESSORIES WARRANTY

Holden's warrants in respect of Holden's Parts and Accessories that it will make good by repair or at its option by replacement any defect occurring in any such Holden's parts and accessories within 12 months from the date of acquisition or in the case of a Holden's part or accessory installed in a vehicle by a Holden Dealer or Service Dealer, within 24 months or before such vehicle has travelled a distance of 50,000 km from the date of installation, whichever first occurs.

Excluded from this warranty are maintenance items such as filters, spark plugs, wiper blades, etc. which require replacement as part of normal vehicle maintenance.

PARTS AND ACCESSORIES WARRANTY EXPLANATION

i ACCESSORIES - NEW VEHICLE

Accessories installed by a Holden Dealer or authorised Service Dealer to the new vehicle at the time of purchase are covered by the Holden's New Vehicle warranty of 24 months or 50,000 km (whichever occurs first) from date of fitment.

ii PARTS AND ACCESSORIES - INSTALLED DURING NEW VEHICLE WARRANTY PERIOD

Parts and/or accessories installed by the Dealer or authorised Service Dealer during the new vehicle warranty period are covered by the unexpired portion of the new vehicle warranty. After expiry of the new vehicle warranty, the parts and accessories warranty will apply up to 24 months/50,000 km (whichever occurs first) from date of fitment.

iii PARTS AND ACCESSORIES - INSTALLED AFTER EXPIRY OF NEW VEHICLE WARRANTY

Parts and/or accessories installed by the Dealer or Service Dealer after expiration of the new vehicle warranty are covered by the parts and accessories warranty of 24 months or 50,000 km (whichever occurs first) from date of fitment.

ii PARTS AND ACCESSORIES - PURCHASED AT RETAIL OR TRADE

Parts and/or accessories purchased at trade or retail and installed by other than the Dealer or Service Dealer are warranted for 12 months from date of purchase (parts and accessories only). In these instances it is necessary to preserve proof of sale records to support warranty claims.

iv PARTS AND ACCESSORIES WARRANTY EXCLUSIONS

Defects in tyres, these being warranted by their manufacturers, batteries which are covered for 12 months and maintenance service items, such as spark plugs, oil/air/fuel filters, coolant/inhibitor, wiper rubbers, brake pads, linings and discs, clutch linings, refrigerant, drive belts, distributor ignition points, bulbs and fuses, which are warranted against manufacturing defect existing at time of installation. Where this Handbook specifies a schedule for replacement of parts, such parts are covered by parts warranty for the extent for the specified maintenance service interval.

WARRANTY QUESTIONS AND ANSWERS

This section is designed to assist you in understanding the Holden's Warranty provided with your new vehicle. The following are some of the most frequently asked questions, for which detailed answers have been provided.

Q 1. How do I go about obtaining Holden's Warranty Service?

It is the responsibility of the Selling Dealer to provide Holden's Warranty service, therefore you should take your vehicle to the Selling Dealer whenever Holden's Warranty service is needed. However, if this is not possible, you may go to any other Authorised Holden Dealer. The details recorded inside the front cover of this handbook will be required by the Dealer.

Q 2. What should I do if my vehicle becomes unsafe or inoperative as a result of a defect which is covered by the Holden's New Vehicle Warranty?

You should contact the nearest Authorised Holden Dealer or Holden's Customer Assistance Service (refer further in this chapter), last page of this chapter) as soon as possible, and arrange for that Dealer to carry out the required Holden's Warranty Service.

Q 3. What should I do if, in an emergency, Holden's Warranty service is required and an Authorised Holden Dealer is not available to provide such service at the time?

If, in an emergency, a repair, replacement or adjustment (covered by the Holden's New Vehicle Warranty) is required to enable your vehicle to be operated safely and it is not practical for you to go to an Authorised Holden Dealer, the service (to the extent that it is necessary to enable your vehicle to be operated safely) may be performed by any other qualified mechanic or repairer. A claim for the reasonable cost may be made through the Authorised Holden Dealer who would normally provide you with Holden's Warranty Service. You must also take your vehicle to the Authorised Holden Dealer for inspection of the service and/or completion of any required Holden's Warranty Service, as soon as possible.

Note: During normal business hours you should seek authorisation from your nearest Authorised Holden Dealer or Holden's Customer Assistance Service (refer further in this chapter), prior to repairs being commenced.

Q 4. Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the Holden's Warranty?

No, these items are not covered. Holden's warranty only covers the repair, replacement or adjustment of those parts of your vehicle which are found to be defective in materials or workmanship. No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your vehicle, will be recognised under the Holden's New Vehicle Warranty.
You may have rights under the law to claim compensation outside of the Holden's New Vehicle Warranty, but any claim based on those rights should be seperately persued.

WARRANTY QUESTIONS AND ANSWERS CONT.

Q 5. Will I have to pay for maintenance costs during the Warranty Period?

Maintenance costs are not covered by the Holden's New Vehicle Warranty. However, the scheduled 1,000 km service specified in this handbook is provided 'labour free'. Lubricants and parts used for this service will, however, be charged to the owner. That is provided that your vehicle has been operated under normal operating conditions and also that no modification (other than a modification made by, or at the direction of, Holden's) has been made to your vehicle. The Maintenance Schedules in this handbook specify the *minimum* maintenance required for your vehicle operating under normal conditions.

The Maintenance items (except where they are required as a result of defects in materials or workmanship) for which you will have to pay for include:

- ★ Engine tune-up, including spark plugs replacement.
- ★ Replacement of all filters, engine and other belts, hoses, wiper blades, clutch linings.
- ★ Cleaning or flushing of fuel, coolant, brake, engine, transmission, differential, power steering etc., after the 1,000 km service.
- ★ Carbon and sludge removal.
- ★ Maintenance servicing of emission control system devices.
- ★ Adding to (or replacing) lubricants.
- ★ Adding to (or replacing) air conditioning refrigerant, after the 1,000 km service.
- ★ Any necessary adjustments to drive belts, transmissions, clutch, park brake etc.
- ★ Wheel balancing - after the 1,000 km service.
- ★ Wheel alignment.
- ★ De-dusting or de-glazing of brake linings or pads - after the 1,000 km service.
- ★ Brake lining wear or damage.
- ★ Brake disc pad or disc wear.
- ★ Battery re-charging.
- ★ Paint, bright metal finish and trim, due to normal deterioration.
- ★ Body panel adjustment - after the 1,000 km service.
- ★ Door, or bonnet lock adjustments.
- ★ Glass or channel adjustments - after the 1,000 km service.
- ★ Body rattle, squeaks and general tightening of bolts, fastenings and fittings - after the 1,000 km service.
- ★ Chipped glass or breakage.
- ★ Torn or damaged floor mats or carpets.
- ★ Normal wear and tear to trim components.

WARRANTY QUESTIONS AND ANSWERS CONT.

Q 6. Are my tyres covered by the Holden's New Vehicle Warranty?

No. The tyres fitted to your vehicle are covered by a separate warranty provided by the tyre manufacturer. Any Authorised Holden Dealer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturer's representative.

Q 7. Are Holden's parts and accessories covered by warranties?

If you buy a Holden's part or accessory from an Authorised Holden Dealer it will be warranted by that Dealer, under the Holden's parts and accessories Warranty, against defects in materials or workmanship for 12 months, from the date of purchase. In the case of a Holden's part or accessory which has been installed in a vehicle by a Holden Dealer, it will be warranted for 24 months or 50,000 km (whichever occurs first) from the date of installation.

Defects in tyres (these being warranted by their manufacturers), batteries (which are covered for 12 months) and maintenance items such as filters, spark plugs, wiper blades and brake pads/linings require replacement as part of normal maintenance. Such replacements are not the subject of this warranty.

Q 8. Will I have to pay for any costs or expenses in connection with the provision of Holden's Warranty service?

All parts and labour used in carrying out Holden's Warranty Service at the premises of the Servicing Dealer are free of charge. Whenever Holden's Warranty service is to be carried out by the Servicing Dealer it is your responsibility to deliver your vehicle to the Servicing Dealer's premises.

If, as a result of a defect which is covered by the Holden's New Vehicle Warranty, your vehicle cannot be driven safely and you arrange for the nearest Authorised Holden Dealer to carry out the required Holden's Warranty Service, Holden's will accept reasonable towing costs to move your vehicle to the nearest Holden Dealer's premises. Before employing a towing company, contact the nearest Holden Dealer and/or Holden's Customer Assistance Service to obtain guidance.

Q 9. Would my vehicle's engine benefit from fuel additives, oil additives or coolant additives not marketed by Holden's ?

The use of break-in oil, tune-up compounds, friction-reducing compounds and other supplemental additives are not recommended; their use will not only increase operating costs, but may also be detrimental to the operation of your vehicle.

HOLDENWISE

ONE FEATURE EVERY CAR MAKER WOULD LOVE TO BE ABLE TO OFFER.

HOLDEN, A LOT MORE THAN JUST A CAR

As you'll soon discover, your new Holden is a lot more than just a car..... because every Holden comes with one very special feature, HoldenWise. HoldenWise was created to offer Holden owners the best Australia wide customer care system possible. To do this we've drawn on all the technical resources and service skills of Holden's. However, the key to our service is and always will be, people, with over 5,000 Holden service and parts specialists spread across the country. Thanks to them, we can offer HoldenWise Customer care at participating Holden Dealers with complete confidence.

HOLDEN SPECIALISTS

HoldenWise technicians have been specially trained by the factory and have the experience in service and parts skills necessary to work on your car. As you can imagine Holden today are a lot more sophisticated than they used to be, which means specialist service is essential. Knowing Holdens so well, our technicians know exactly how long each service takes, which is why Holden dealers can offer fixed price servicing.

HOLDENWISE FIXED PRICE SERVICING

HoldenWise has eliminated one of the big worries about car services, not knowing what the bill will be. Every participating Dealer service centre offers fixed price servicing. You need only ask and you'll be given a quote on how much the job will cost before it's started. So there are no nasty surprises when paying the bill.

Of course, if during the service, a problem is discovered, you'll be telephoned immediately before any more work is done.

You may be comforted to know that all participating Dealer work is covered by a workmanship warranty.

HOLDENWISE WORKMANSHIP WARRANTY

All services and repairs are covered by a 6 month/10,000 km Dealer warranty on workmanship. If a fault arises during that period, due to the service, your Holden Dealer will fix it. But workmanship isn't the only thing that is guaranteed.

HOLDENWISE

QUALITY SERVICE & PARTS

We guarantee our service workmanship for a period of 6 months or 10,000 kilometres.

GUARANTEE

HOLDENWISE

HOLDEN PARTS WARRANTY

The parts used in HoldenWise services are manufactured and tested to the same high standards as the originals, so Holden quality parts carry the same 24 month/50,000 km warranty when fitted by the Dealer. Naturally the warranty does not apply to normal maintenance parts like oil filters and spark plugs.

Whilst on the subject of parts, how often have you been told you'll have to wait a while until the parts can be found?

Thanks to the HoldenWise network, it's something you're unlikely to encounter at your Holden Dealer.

THE HOLDENWISE NETWORK

Most HoldenWise Dealer service and parts centres are computer linked through to the factory, which means you'll never have to wait an eternity for the right parts to be found.

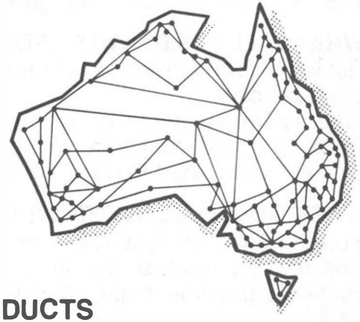
What's more, with around 350 Dealers nationwide, you'll never be far from the same high standard of service.

HOLDEN ACCESSORIES

Holden accessories are designed and approved as an integral part of your vehicle so you know they will fit and function precisely. When installed by the Holden Dealer to your new vehicle, Holden accessories are covered by the Holden's warranty of 24 months or 50,000 km for your added protection.

CUSTOMER ASSISTANCE

Finally, we suggest you read the last page of this chapter for information on Holden's Customer Assistance Service.



UNAUTHORISED STATEMENTS IN RELATION TO HOLDEN'S PRODUCTS

No Holden Dealer or other person is authorised or permitted to give or make any statement assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any Holden's product or in connection with the supply of any Holden's product, which is at variance with any written statement assertion or undertaking on any of these subjects given or made by Holden's in its published sales literature, and the Company does not accept any such unauthorised action.

3 YEAR / 24 HOUR ROADSIDE SERVICE

OUR COMMITMENT TO YOUR SATISFACTION

Holdenwise Roadside service forms part of the unequalled commitment by Holden's to provide total motoring satisfaction to their valued customers.

From design through manufacturing to servicing, and now, beyond to the open road, our aim is to provide the finest possible ownership experience from the minute delivery is made.

HoldenWise Roadside Service is your key to worry free motoring - one that covers you in your driveway or on the road, as far as you can drive, all day and night, on weekends, in fact the whole year through.

We hope the need never arises, but if it does, we'll be there to assist through HoldenWise Roadside Service.

HOW DOES HOLDENWISE ROADSIDE SERVICE WORK?

When you choose a new Holden passenger car (excluding Holden Ute) you will not only make a wise purchase decision , you will also be covered by a 24 hour a day, 365 days a year, professional Roadside Emergency Service.

This service is provided throughout Australia by over 850 service centres, all constituents of the Australian Automobile Association.

WHAT WILL HOLDENWISE ROADSIDE SERVICE DO FOR ME?

HoldenWise Roadside Service is designed to assist you should your car become disabled on a road which is trafficable to normal two wheel drive vehicles.

Where permanent repairs are either not possible or practicable, temporary repairs will be carried out, or the vehicle towed to the local Holden Dealer or approved repairer. Your vehicle must be disabled due to (non-collision related) mechanical failure or automotive related driver fault i.e. : an unexpected flat tyre, flat battery, vehicle lock out, or even if you simply run out of fuel.

WHEN DO THE BENEFITS BEGIN?

Your HoldenWise Roadside Service, which is transferable to subsequent owners, begins the moment you purchase your vehicle. Your Holden Dealer will complete an Interim Card which will entitle you to all the benefits of HoldenWise Roadside Service from that moment on. This interim card will assist you to gain roadside service and serves to identify you as a valued Holden Customer until your Roadside Service kit and I.D. card arrives.

WHERE CAN I GET HOLDENWISE ROADSIDE SERVICE?

The same service is available to you at your home, or at the side of the road, in fact emergency roadside assistance is available just about anywhere you may need it.

HOLDENWISE

IS THERE ANY JOINING FEE?

Every new Holden passenger car owner is eligible for this complimentary service for a period of 36 months.

WHAT WILL HOLDENWISE ROADSIDE SERVICE COST ME?

Materials, fuel and spare parts supplied during the emergency service must be paid for. Any reimbursement of expenses covered by your warranty can be claimed by contacting your Holden Dealer.

ROADSIDE SERVICE PLUS - PRESTIGE CARS

If you purchase a Caprice, Statesman, Calais or Calibra you automatically receive a special enhancement package. This gives the owner all the benefits of HoldenWise Roadside Service with the addition of some very valuable extras. These include extended towing, accommodation allowance for up to 3 nights, alternative transportation, rental car allowance and vehicle recovery.

HSV - HOLDEN SPECIAL VEHICLES

Purchases of the Holden Special Vehicles - Club Sport, Sportswagon, Senator, Senator 5000i, Statesman 5000i and Maloo automatically qualify for the coveted HSV - Gold Lion Membership package which includes many unique benefits. A Gold Lion Membership, includes all the benefits incorporated in the HoldenWise Roadside Service package. The service is provided by the same fleet of AAA trained professionals who will where possible, get you motoring again or arrange towing if needed.

HOW DO I CALL FOR SERVICE?

To access HoldenWise and HSV-Gold Lion Roadside Service simply telephone our central HoldenWise 24 hour Toll Free emergency number: 008 817100. This number accesses one of the many emergency service centres closest to the point of call.

All Holden passenger car owners receive a comprehensive HoldenWise Roadside Service kit that contains full details of the service and any limitations which may apply along with a series of booklets that enable new owners to fully understand the services provided. You should expect to receive your kit shortly after purchase of your new Holden.

AUTHORISED HOLDEN DEALERS

N.S.W. Metropolitan

ARNCLIFFE Suttons Motors Arncliffe Pty Ltd - 93 Princes Highway
ASHFIELD Muirs Motors (Ashfield) Pty Ltd - 252 Parramatta Road
BALGOWLAH James Langfield Holden - 164 Condamine Street
BLACKTOWN West City Holden - 120~128 Sunnyholt Road
CABRAMATTA John Abrahams Holden - 266~284 Hume Highway
CAMPBELLTOWN Paul Wakeling Holden - Cnr Blaxland & Campbelltown Rds
CASTLE HILL Windsor Road Holden - Cnr Victoria Ave & Windsor Road
CHULLORA Suttons Motors (Chullora) Pty Ltd - Cnr Hume Hwy & Waterloo Road
CROWS NEST New Hunter Holden - 446 Pacific Highway
DEE WHY Peninsula Holden - Cnr May & Mooramba Roads
GORDON Sundell Holden -Cnr 836 Pacific Hwy & McIntyre Street
HOMEBUSH Suttons Motors Homebush Pty Ltd - 112 Parramatta Road
HOMEBUSH Gilbert & Roach Pty Ltd - 167~173 Parramatta Road
LAKEMBA Michael Lyons Holden - 817 Canterbury Road
LIVERPOOL A.C. McGrath & Co Pty Ltd - 411~419 Hume Highway
MIRANDA Greg Ball Holden - 1~3 Kiora Road
NEWPORT Esso Car Care Centre (Mobil) - 340 Barrenjoey Road
PADSTOW Princeton Holden - 19 Davies Road
PARRAMATTA Boyded Parramatta - 65 Church Street
PENNANT HILLS Barry Smith Holden - 351~355 Pennant Hills Road
PENRITH Triway Holdings Pty Ltd - 39~47 Henry Street
ROCKDALE Peter Terry Holden - 571 Princes Hwy
RYDE Hunter Holden - 603~605 Victoria Road
SPRINGWOOD Springwood Holden - 15 Ferguson Road
ST. MARY'S John Young Holden - Cnr Glossop & Harris Streets
WAITARA Suttons Motors Waitara Pty Ltd - 90 Pacific Hwy
WINDSOR Hawkesbury Valley Holden - 18 Macquarie Street

N.S.W. Country

ADELONG Robert Broadhurst Holden - Tumut Street
ALBURY Brian White Holden - 647~657 Dean Street
ARDLETHAN Carr's Engineering - 4 Mirrool Street

ARMIDALE New State Motors - 103 Rusden Street
BALLINA Quayside Motors - Pacific Highway
BARADINE John Farrell & Co. - Wellingon Street
BARHAM Hall's Motors Pty Ltd - 44 Noorong Street
BATHURST Bathurst Motors Pty Ltd - 54 Durham Street
BATLOW Robert Broadhurst Holden - Pioneer Street
BEGA South Coast Holden - 247 Carp Street
BELLINGEN E.H.H. Raymond Pty Ltd - Broadway
BELMONT Challenge Holden - 444 Pacific Highway
BLAYNEY Alan May Automotive Services - 98 Adelaide Street
BOMBALA Delcott Engineering Pty Ltd -Maybe Street
BOOROWA Boowowa Auto Repairs - 40 Marsden Street
BREWARRINA Lukas Holden - Bathurst Street
BROKEN HILL Donlee Motors Pty Ltd - Cnr Galena & Rakow Streets
CANOWINDRA Canowindra Motors - Gaskill Street
CARDIFF Brian Kelly Holden 35~39 MacQuarie Road
CASINO McKinnon Holden - 142 Barker Street
CESSNOCK Geoff Boyd Holden - 173~175 Wollombi Road
COBAR Cobar Motors Pty Ltd - Barton Street
COFF'S HARBOUR Geoff King Holden Cnr Pacific Hwy & Thompson Road
COOLAMON Coolamon Motors - Cowabbie Street
COOMA Summit Holden - 66~70 Sharp Street
COONABARABRAN Alan McWhirter Holden - John Street
COONAMBLE Moody's Motors - 37 Aberford Street
COOTAMUNDRA Jenkins Garage - 111 Wallendoon Street
COROWA R.W.E. Fraser & Co Pty Ltd - 218 Honour Avenue
COWRA Waugoola Motors Pty Ltd - Kendal Street
CROOKWELL Crookwell Autos -114 Goulburn Street
DENILIQUIN Burchfield Bros & Co -112~114 End Street
DORRIGO Phil Noble Motors - 46~48 Hickory Street
DUBBO John Kierath - 54 Bourke Street
DUNGOG Turner Holden - 248 Dowling Street
EDEN Ron Doyle -113 Imlay Street

N.S.W. Country cont.

FINLEY Riverina Garage Finley -104 Murray Street
FORBES Paddison & Co - Cnr Rankin St & Court Lane
GILGANDRA Allan Cooper Holden - 106 Warren Road
GLEN INNES Glen Severn Holden - 167 Grey Street
GLOUCESTER Grahame's Garage Pty Ltd -1 Park Street
GOSFORD Noble Holden - Pacific Highway
GOULBURN Geissler Motors - 279~298 Auburn Street
GRAFTON Ken Casson Holden - 71~ 75 Spring Street
GRENFELL Terry Carroll Motors Pty Ltd - 40 Alexandra Street
GRIFFITH Leo Franco Holden -164~166 Yambil Street
GULARGAMBONE Gulargambone Motors - Bourbah Street
GUNNEDAH Namoi Valley Motors - 48 Barber Street
GUNNING Bailey's Garage Pty Ltd - Yass Street
GUYRA Burgess Garage Pty Ltd - 131~143 Bradley Street
HARDEN Ginty & O'Leary - Cnr Station & Albury Streets
HAY Royce Curtis Motors - 168 Lachlan Street
HOLBROOK Lieschke Motors Pty Ltd - Albury Street
INVERELL Gaukroger Sales Pty Ltd - Vivian Street
JERILDERIE Jerilderie Motors - Jerilderie Street
KANDOS Chrisfield Holden - 11 Angus Street
KATOOMBA Katoomba Holden - 136 Great Western Highway
KEMPSEY Thoroughgood Motors - 118~132 Belgrave Street
KIAMA Glen Fulton Holden - 35~41 Collins Street
KYOGLE O & A Holden - 128~134 Summerland Way
LEETON John Ryan Holden - 47 Pine Street
LISMORE John Chant Motors Pty Ltd - 21~27 Carrington Street
MACKSVILLE Eastland Auto Centre - 18~22 Cooper Street
MACLEAN O'Halloran Motors - 175 River Street
MAITLAND Heritage Holden - 557~567 High Street
MOREE Keith Haddad Holden - Cnr Boston & Heber Streets
MORUYA Surfair Holden - 88 Vulcan Street
MOSS VALE Vagg & Partners Holden - 160 -162 Argyle Street
MULLUMBIMBY Tony Carsburg Holden - 2 Argyle Street

N.S.W. Country cont.

MUDGEE Ross Granata Motors - 47~55 Market Street
MURWILLUMBAH Tweed Motors Murwillumbah - 29 Prospero Street
MUSWELLBROOK Upper Hunter Motors Pty Ltd - 116 Bridge Street
NARRABRI Allan Cooper Holden - 181 Maitland Street
NARRANDERA C. & S. Coelli - 6 Boundary Road
NARROMINE L.E. Stanley Pty Ltd - Dandaloo Street
NEWCASTLE Young & Green Pty Ltd - 745 Hunter Street
NOWRA Glendon Motors Holden - 301~313 Princes Highway
ORANGE Canobolas Holden - 348 Summer Street
PARKES Go Motors of Parkes - Cnr Mitchell & Clarinda Streets
PEAK HILL S.Leary & Sons Pty Ltd - Mingelo Street
PORT MACQUARIE Todd Holden - 16~20 Clarence Street
QUIRINDI Browning Motors - 82 Henry Street
SCONE Upper Hunter Motors (Scone) - 91 Kelly Street
SINGLETON Lancaster Holden - 80 John Street
TAMWORTH Kensells Holden - Cnr Bourke St & Kable Ave
TAREE Hardes Auto House - 61 Manning Street
TEMORA Rod Lovering Holden - 2 Stockinbingal Road
TENTERFIELD Sexton & Green (Sales & Service) Pty Ltd -148 Rouse Street
TORONTO Young & Green (Toronto) Pty Ltd - Carey Street
TUMBARUMBA Broadhurst Autos - Albury Street
TUMUT Nancarrow Holden - 35 Fitzroy Street
TWEED HEADS Tweed Motors Pty Ltd - 75~79 Pacific Highway
ULLADULLA Johnston Holden - 150 Princes Highway
WAGGA Wagga Motors Pty Ltd - 32 Dobney Avenue
WALCHA Bowden's Garage Pty Ltd - Derby Street
WALGETT Walgett Garage Pty Ltd - 81 Wee Waa Street
WALLA WALLA D.E. Lieschke & Son Pty Ltd - Commercial Street
WARIALDA Roger Moore - Hope Street
WARILLA Wilson's Warilla Pty Ltd - 29 Shellharbour Road
WARREN Fuller Bros - Dubbo Street
WELLINGTON Gersbach's Garage Pty Ltd - 92 Lee Street
WEST WYALONG West Wyalong Motors - 183 Main Street

N.S.W. Country cont.

WOLLONGONG Dwyers City Holden - 31~33 Crown Street
WYONG W.M. Holden - Pacific Highway
YASS Bill Nesbitt Holden - 221 Comur Street
YOUNG Harden & Geelan Holden - 48 Boorowa Street

A.C.T.

BELCONNEN Gerald Slaven Holden - Josephson Street
BRADDON Beazley & Bruce - 44 Mort Street
PHILLIP Commonwealth Motors Pty Ltd - 158 Melrose Drive

Vic. Metropolitian

BERWICK Barry Bourke Holden - 755 Princes Highway
BUNDOORA Watson Holden - 413 Grimshaw Street
BURWOOD Penfold Holden - 63 Burwood Road
CAULFIELD Booran Holden - 1234 Glenhuntly Road
CHELSEA Harrison Holden - 370 Nepean Highway
CHELTENHAM Booran Holden - 1212 Nepean Highway
DANDENONG Daryl Shave Holden - 25 Lonsdale Street
ELSTERNWICK Reg Hunt Holden - 77 Nepean Highway
ESSENDON Preston Motors (Essendon) Pty Ltd - 205~211 Keilor Road
FAWKNER Mantello Holden - 1263 Sydney Road
FERNTREE GULLY Neilson Holden F.T.G. - 980 Burwood Highway
FOOTSCRAY Alan Mance Holden - 435 Barkly Street
FRANKSTON Noel Gould Holden - 140 Dandenong Road
GEELONG R & B Smith Holden - 510 Moorabool Street
GEELONG Winter & Taylor (Sales) Pty Ltd - 23 Cavendish Street
GLEN WAVERLEY Geoff Brady Holden - 565~577 Springvale Road
HASTINGS Westernport Holden - 843 Frankston~Flinders Road
LILYDALE Noel Dight Holden - 344 Main Street
MORNINGTON John Collins Holden - 976 Nepean Highway
OAKLEIGH Garry & Warren Smith - 1575 Dandenong Road

PRESTON Ralph D'Silva Holden - 573-603 High Street
RINGWOOD Patterson Cheney Holden - 45~57 Maroondah Highway
SOUTH MELBOURNE Patterson Cheney Holden - 132 Sturt Street
SUNSHINE Kevin Dennis Holden - 272 Ballarat Road
WERRIBEE Ballan Holden - Princes Highway
WEST MELBOURNE Reg Hunt Holden - 577 King Street

Vic. Metropolitian

ALEXANDRA Alexandra Tyre & Hire - 79 Grant Street
ARARAT David Reid Motors - High Street
BAIRNSDALE The Big Garage - 199 Main Street
BALLARAT Peter Amor Motors - 2~26 Mair Street
BENALLA Arnott's Motors - 88~90 Bridge Street
BENDIGO Ron Poyser Holden - Cnr High & Myrtle Streets
BIRCHIP R.L. & C.J. Bales - 38 Cumming Avenue
BOORT Jaron Motors - 55 Godfrey Street
CAMPERDOWN Camperdown Auto Parts - 96 Manifold Street
CASTERTON Coxons Autos - 139 Henty Street
CASTLEMAINE Terry Scully Motors - Barker Street
CHARLTON K.V. Charlton - 70 High Street
COBRAM Neville Mustica Motors - Murray Valley Hwy
COHUNA Humphrey Motors Pty Ltd - 13~15 Market Street
COLAC Parker Bros Motors Co - 224 Murray Street
CORRYONG Boers Motors - 88~90 Hanson Street
DAYLESFORD K.R. Little Pty Ltd - Vincent Street
DIMBOOLA Westerfield Motors Pty Ltd - 64 Lloyd Street
DONALD O.A. Shilton & Sons Pty Ltd - 5 Wood Street
ECHUCA Echuca Motors - 148 Murray Valley Highway
EUROA Croxford Holden - 41 Clifton Street
FOSTER Ray Dower Motors - 78 Main Street
HAMILTON Peter Sandow Motors Pty Ltd -261 Gray Street
HOPETOUN Hopetoun Motors - 78 Lascelles Street

Vic. Country

Vic. Country cont.

HORSHAM Ivan Morrow Motors Pty Ltd - 22 O'Callaghans Street
KANIVA Kaniva Motors - 82 Commercial Street
KOOWEERUP Gray Blakey Holden - Station Street
KORUMBURRA Peter Dunlevie Holden - 42 Commercial Street
KYABRAM D'Alberto Holden - 60 McEwen Road
KYNETON Mollison Motors Pty Ltd - 167 Mollison Street
LEONGATHA Gleeson Holden - 37~43 Bair Street
MAFFRA Knight Paterson Holden - Johnson Street
MANSFIELD Christopher & Kirley Automotive Services - Early Street
MARYBOROUGH Graham Jacka Holden - 35 Nolan Street
MILDURA Stuart & Harrison (Sales) Pty Ltd - 24~32 Deakin Avenue
MIRBOO NORTH Ridgeway Motors - 106 Ridgeway Road
MORTLAKE W. Christian (Mortlake) Pty Ltd - 107 Dunlop Street
MURRAYVILLE Peers Motors - McKenzie Street
NATHALIA BHB Motors - 6 Blake Street
NHILL Ivan Morrow Motors Pty Ltd - 71~73 Nelson Street
NULLAWIL Nullawil Motors & General Engineers - Calder Highway
ORBOST Merlin Motors - Stanley Street
PORTLAND Reynolds Holden - Henty Highway
QUAMBATOOK Quambatook Auto Services - 32 Gutherie Street
ROCHESTER Bruce Hocking Motors Pty Ltd - 71 Moore Street
RUTHERGLEN Jasper Bros Pty Ltd - 62 Main Street
SALE Keith Boyd Holden - 273 York Street
SEA LAKE Paddy Smith Holden - Calder Highway
SEYMOUR Neil Beer Holden - 49 Emily Street
SHEPPARTON Parker Bros. Auto Co. - Melbourne Road
STAWELL Tonkin Motors - 71~73 Main Street
TALLANGATTA Crispin Motors - 21 Towong Street
TIMBOON Timboon Motors - Bailey Street
TRARALGON Colin Watson Holden - Princes Highway
UNDERBOOL A.J. Gloster & Sons - Cotter Street
WANGARATTA Alan Capp (New Cars) Pty Ltd - Tone Road
WARBURTON Col McKenzie Holden - Main Street

Vic. Country cont.

WARRACKNABEAL Amor Motors Aubrey Truck Sales - 33 Woolcock Street
WARRAGUL Vin Rowe Holden - 3 Endeavour Street
WARRNAMBOOL Callaghan Motors Pty Ltd - 133~137 Fairy Street
WONTHAGGI J.P. Holden - 2 Murray Street
YARRAM Graham Helleren Motors Pty Ltd - Bland Street
YARRAWONGA Pigdons Pty Ltd - Belmore Street

Tasmania

BURNIE Motors Burnie - 84~89 Marine Terrace
DEVONPORT Motors Devonport - Victoria Parade
HOBART Motors Pty Ltd - 179 MacQuarie Street
KING ISLAND King Island Motors Pty Ltd - Netherby Road, Currie
LAUNCESTON Motors Launceston - 93~95 Elizabeth Street
SMITHTON Motors Pty Ltd - 116 Nelson Road
ULVERSTONE Motors Pty Ltd - 99 Reibey Street

Qld. Metropolitian

ALBION Bill Harrison Car Sales - Frodsham Street & Crosby Road
ASPLEY Zupps (Aspley) -1442 Gympie Road
CAPALABA Oldfield Holden - 103 Redland Bay Road
INDOOROOPILLY Westpoint Holden - 40 Moggill Road
IPSWICH Ross Llewellyn Holden - 246 Brisbane Road
MOOROOKA John Sivyer Holden - 1060 Ipswich Road
MT. GRAVATT Zupps Motors Pty Ltd - 1310 Logan Road
NEWSTEAD Eagers Retail Pty Ltd - 95 Breakfast Creek Road
NUNDAH Eagers (Northside) - 1319 Sandgate Road
PETRIE North Pine Motors - 1059 Gympie Road
REDCLIFFE Village Holden - 425 Elizabeth Avenue
SPRINGWOOD Motorama Holden - 3455 Pacific Highway
WINDSOR Leach Holden - 143 Newmarket Road
WOOLLOONGABBA Armstrong Holden - 73 Ipswich Road
WYNNUM Doug Barton Holden - 200 Tingal Road

Qld. Country

ATHERTON Redding Motors Pty Ltd - 2 Cook Street
AYR Honeycombes Sales & Service - 213~217 Queen Street
BEAUDESERT Lawson Holden - 57 Brisbane Street
BOWEN McDermott Holden - 98 Herbert Street
BUNDABERG Ross Gray Holden - Takalvan Street
CABOOLTURE Becham Holden - Bribie Island Road
CAIRNS Ireland Holden - 227~233 Mulgrave Road
CALOUNDRA Drinnan Holden - Caloundra Road
CHARLEVILLE Alan Dobbin Holden - 129 Alfred Street
CHARTERS TOWERS Peters Holden - 57 Mosman Street
CHINCHILLA Ainsworth Motors & Machinery Pty Ltd - 55 Chinchilla Street
CLONCURRY Cloncurry Motors - 59 Scarr Street
CUNNAMULLA Tims Motors - 56 King Street
CROWS NEST Dennis Nissen Motors - 14 William Street
DALBY Johnson's Holden - 36 Drayton Street
EMERALD Orion Agriculture Supplies Pty Ltd - Clermont Street
GATTON Gatton Auto Centre - 67 Railway Street
GLADSTONE Andersons Auto City - 56 Yarroon Street
GYMPIE Madills - 35 Mellor Street
INGHAM Origlasso Motors - 99 Lannercost Street
INNISFAIL I.C. Taylor Pty Ltd - 117 Edith Street
JULIA CREEK Julia Creek Motors Pty Ltd - Burke Street
KILCOY Hobart's Garage - 58 Mary Street
KINGAROY John Dundas Pty Ltd - 38 King Street
LAIDLEY Buhse's Garage Pty Ltd - 5 Spicer Street
LONGREACH Longreach Motors - 33 Swan Street
MACKAY Pioneer Holden - Cnr Gordon & Wellington Streets
MAROOCHYDORE Sunco Holden - Wises Road
MARYBOROUGH Whitaker Holden - 109~111 March Street
MOUNT ISA Barkly Motors Pty Ltd - Marian Street
MURGON Clifton Motors - McAllister Street
NAMBOUR Kallenbach Motors - 139 Howard Street
NANANGO Nanango Motors Pty Ltd - 72~74 Drayton Street
NOOSA HEADS Gilbert Motors Pty Ltd - Cnr Cooroy Noosa Rd & Coral Tree

Qld. Country cont.

PROSERPINE Crossley Car Whitsunday Pty Ltd - 162~164 Main Street
QUILPIE Quality Motors - Boonkai Street
ROCKHAMPTON Lawrence's - 327 Richardson Road
ROMA Maranoa Multi Agencies - Bowen Street
SOUTHPORT Lockhart Holden - Cnr Nerang Road & Olsen Avenue
SPRINGSURE Springsure Motors - Eclipse Street
ST. GEORGE Halpin Motors - 39~41 Grey Street
STANTHORPE Central Motors - 42 Maryland Street
TOOWOOMBA Eagers Retail Pty Ltd - Cnr James & Hume Streets
TOWNSVILLE Tony Ireland Holden - 87~91 Charters Towers Road
TULLY Island Coast Holden - 12 Richardson Street
WARWICK Deighton Motors Pty Ltd - Grafton Street
WINTON Gillespie Motor Dealers Pty Ltd - Elderslie Street

N.T.

ALICE SPRINGS Kittle Bros (Alice Springs) Pty Ltd - Cnr Wills & Railway Terrace
DARWIN Kerry Holden - 21~25 Stuart Highway
KATHERINE Master Motors - 1130 Victoria Highway

S.A. Metropolitian

ADELAIDE City Holden - 203~221 Grenfell Street
ELIZABETH Peter Page Holden - Elizabeth Way
MALVERN Claridge Holden - 361~367 Unley Road
PORT ADELAIDE Smiths of Port Adelaide - 271 Commercial Road
REYNELLA Southgate Holden - 49~59 Main South Road
SOMERTON PARK Ellers Holden - 278 Brighton Road
THEBARTON United Holden - 1 Port Road
VALLEY VIEW Plaza Holden - 817~839 North East Road

S.A. Country cont.

BALAKLAVA Balaklava Motors - 4 Wallace Street
BERRI Rosenthal Bros Pty Ltd - Vaughan Terrace
CEDUNA Beck Motors Pty Ltd - Poynton Street
CLARE Brian Holmes Holden - 7 Old North Road
CLEVE Herbert Motors Pty Ltd - Rudall Road
CRYSTAL BROOK Newitt's - 26 Brandis Street
CUMMINS Trigg & Wedd - 3 Umlauf Street
GAWLER Steinhage Holden - Cnr Murray & Bridge Sts
KADINA J.H. Rosewarne Pty Ltd - Graves Street
KEITH Farmers Centre - McBain Street
KINGSCOTE Roberts Motors - Telegraph Road
KINGSTON Lecornu's Service Garage - Agnes Street
LOXTON Flight Motors Pty Ltd - Bookpurnong Terrace
MAITLAND Maitland Motors Pty Ltd - 58 Robert Street
MALLALA Curnow's Garage Pty Ltd - Balaklava Road
MENINGIE Peter Hood Holden - Cnr Princes Highway & Coonalpyn Road
MILLICENT Dennis Cowling Holden - 98 George Street
MT. BARKER Gilbert Motors (Mt. Barker) Pty Ltd - 57 Adelaide Road
MT. GAMBIER O.G. Roberts & Co - Jubilee Highway West
MURRAY BRIDGE Dutton Motors Pty Ltd - 7 Adelaide Road
NARACOORTE Kingcraig Motors Pty Ltd - 158~164 Smith Street
PORT AUGUSTA Ken Feltus Holden - 38 Stirling Road
PORT LINCOLN City Motors - King Street
PORT PIRIE Spencer Holden - 50 Ellen Street
RENMARK Rosenthal Motors Pty Ltd - Ral Ral Avenue
STRATHALBYN Gilbert Motors (Strathalbyn) Pty Ltd - High Street
TANUNDA E.Hage & Co Pty Ltd - 50 Murray Street
VICTOR HARBOR Southern Holden - 5 Victoria Street
WAIKERIE Riverside Holden - 6 Crush Terrace
WHYALLA Mitchell Holden - 64 Essington Lewis Avenue
YANKALILLA Martin Motors Pty Ltd - Main Street
YORKETOWN Southway Holden - 7 Minalaton Road

W.A. Metropolitian

CANNINGTON Brian Gardner Holden - 1308 Albany Hwy
FREMANTLE Shacks Holden - 64 Queen Victoria Street
GOSNELLS Lance Gibbons Holden - 2325 Albany Highway
MELVILLE Melville Motors Pty Ltd - 532~540 Canning Highway
MIDLAND Goldy Holden - 161 Great Eastern Highway
MORLEY Metro Motors Pty Ltd - 212 Walter Road
NAVAL BASE Shacks Cockburn - 15 Rockingham Road
OSBORNE PARK North City Holden - Cnr Scarborough Beach Rd & Harborne St
PERTH City Motors - 505 Newcastle Street
VICTORIA PARK Young's Holden - 529 Albany Highway
WANNEROO Phoenix Holden - 5 Berriman Drive

W.A. Country

ALBANY Manley Stanwell Holden - 92~98 Earl Street
BRIDGETOWN Kordics Bridgetown - Hampton Street
BROOKTON Coote Motors - Robinson Road
BROOME Norwest Holden - McPherson Street
BUSSELTON Fennessy Holden - 2~4 Bussell Hwy
CARNAMAH T & H Walton Stores Pty Ltd - Robertson Street
CARNARVON North West Autos - 175 Robinson Street
COLLIE Station Motors - 102 Throssell Street
CORRIGIN Farmpower - Kunjin Road
CRANBROOK Cranbrook Motors - 11~13 Gathorne Street
DALWALLINU Reid & Inglis - Johnson Street
ESPERANCE Dempster Holden - Norseman Road
GERALDTON Youngs Motors - Cathedral Avenue
GNOWANGERUP G.S. Hendry & Co Pty Ltd - Yougenup Street
KALGOORLIE Kyle Motors - 114 Boulder Road
KARRATHA Moxham Holden- Lot 1952 Balmoral Road
KATANNING Edwards Holden - 159 Clive Street
KELLERBERRIN Dowding Motors - 1 Mitchell Street
KUNUNURRA Elgee Automotive & Diesel Services - Mango Street
MANJIMUP Kordics - Rose Street

MERREDIN Carson's of Merredin - 112 Barrack Street
MOORA Frank Lewis Holden - Gardiner Street
NAREMBEEN Aquip Machinery - 20 Churchill Avenue
NORTHAM Withnell Motors - 58 Fitzgerald Street
PORT HEDLAND Leete Motors - 26~28 Anderson Street
WAGIN Marley White & Co - Tudor Street
WONGAN HILLS Agro Machinery Pty Ltd - Fenton Street
WYALKATCHEM J.S. Rimmer & Sons - Railway Terrace

CUSTOMER ASSISTANCE

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.
Normally, any problems with the sales, operation or servicing of your vehicle will be handled by your Dealer's Sales and Service Department.
We realize however, that, with the best intentions, misunderstandings do occur sometimes.

Therefore, we suggest you discuss any concern with one of the Dealer's management people. If you haven't received satisfaction from the Sales Manager or Service Manager - go to the General Manager or to the Dealer himself.

By now you should have satisfaction. If not, the Holden's Customer Assistance office is at your disposal.

The Holden's Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The Melbourne area number is 646 5466. Outside the Melbourne Metropolitan area, the number is 008 03 3349.

If your concern relates to parts/accessories and you have made contact with the Dealer or Distributor without satisfaction, you may contact Holden's Service Parts Operations on (03) 797 7341
Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

The Manager
Holden's Customer Assistance Services
GPO Box 548D
Melbourne, 3001.

Your letter should clearly outline your concern or query, and include the following:

- ★ Your name and address
- ★ Telephone numbers, both private & Business
- ★ Servicing Dealership's name and address
- ★ Vehicle model
- ★ Vehicle identification number (I.S.O.V.I.N.)
- ★ Date of purchase
- ★ Current odometer reading

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of this handbook.
Before you write however, remember that the telephone is the quicker and more efficient means of communication.

Important Service Information

Vehicle Efficiency

Always have your Holden serviced regularly, for by doing this, you will ensure continued efficiency and reliability of your vehicle.

It is recommended that you ask your Holden dealer to carry out the service because they are equipped with special service tools and have staff experienced in servicing Holden vehicles.

Recommended Daily & Weekly Checks

The checks given below are easily carried out and are strongly advised.

DAILY CHECKS:

1. Coolant (radiator water) level — see "Checking the engine coolant level" in section "A" of this book.
2. Engine oil level — see "Checking the engine oil level" in section "A" of this book.

WEEKLY CHECKS:

1. Tyre pressure including spare — see tyre placard on front right "B" pillar below the door lock.
2. Brake and clutch master cylinder fluid levels — see "Checking brake and clutch fluid" in section "A" of this book.
3. Windshield washer fluid levels — see "Adding washer fluid" in section "A" of this book.

Vehicle Appearance

If you park or garage your vehicle where the atmosphere or road surface contains salt, you should wash your vehicle frequently to minimise corrosion. See "Corrosion prevention and appearance care" in section "A" of this book.

Lubricant Selection

When your vehicle was being designed, great care was taken when selecting lubricants for the engine, transmission and differential. These lubricants are given in this Handbook; they have been extensively tested and give the required performance. It is not recommended that their chemical composition be changed by adding proprietary line additives.

Cooling System Coolant Type Selection

Your engine cooling system must contain ethylene-glycol based antifreeze containing anticorrosive.

Ethylene-glycol antifreeze coolant containing anticorrosive is the type of coolant your new Holden was delivered with. In addition to providing antifreeze protection and preventing subsequent damage to the engine as a result of freezing, the coolant also protects the engine cooling system from corrosion.

The use of Holden approved coolant is essential when replacing the coolant in Holden vehicles. The Holden coolant's chemical composition is the product of extensive research and development, and has been designed to provide maximum protection for your engine and associated components when replaced in correct proportions in accordance with the vehicle maintenance schedule. When replacing coolant, it is essential that all existing coolant be thoroughly flushed from the system (includes engine, radiator, heater and hoses) and Holden's approved coolant added together with clean demineralised or distilled water. See "Changing the engine coolant" in section "A" of this Handbook. Holden approved coolant must be used to provide maximum protection.

For information on coolant specifications, refer to "Specifications" in Section "A" of this Handbook.

NOTICE:

To prevent possible harm to the engine, the mixing of the Holden approved product with any other additive or antifreeze must not occur.

Use only clean demineralised or distilled water to fill the cooling system.

Do not use alcohol type antifreeze or plain water alone.

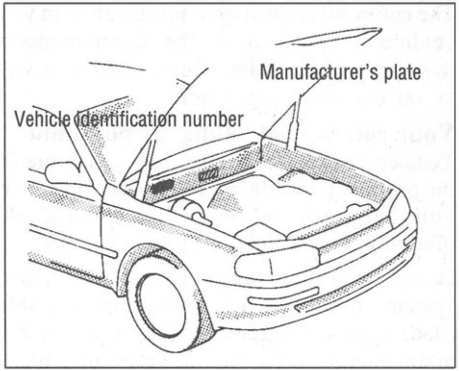
Whenever coolant is replaced, the system must be thoroughly flushed as described in "Changing the engine coolant" section "A" of this Handbook.

Holden's Commitment to Quality Service

Quality is uppermost throughout the design, testing and manufacture of Holden vehicles. Each one is made to exacting specifications for your driving comfort and enjoyment. Modern motor vehicles are extremely complex and contain many parts. Occasionally, a failure of one of the parts may occur. Should you experience such a failure, you will find your nearest Holden Dealer well equipped to correct it as each dealership has special service tools and trained technicians.

If you are travelling and require service but are too far from your servicing Dealer, you will find the name, address and telephone number of the dealer nearest you in the Holden Service Directory contained in this Handbook.

Your Holden's Identification



Vehicle Identification Number (VIN) is stamped on the engine compartment bulkhead.

The manufacturer's plate, mounted on the same bulkhead, contains VIN, model data and date of manufacture (see below).

DATE OF MANUFACTURE MEANS:

The date of manufacture, herein called the "Built Date," is the calendar month and year in which the body shell and power train sub-assemblies are conjoined and the vehicle is driven or moved from the production line.

Vehicle emission control information

Environmental protection

The emission control systems installed in your vehicle comply with all the requirements of the relevant Australian Design Rules as well as various other regulations.

Your role in controlling air pollution

To keep our air clean, you are responsible for the proper operation, maintenance and care of your vehicle in accordance with the instructions contained in this handbook.

Do not remove or modify the emission control systems in any vehicle operating on public roads after the purchase of the vehicle. Any maintenance work on the emission control systems other than that specified by Holden should be avoided.

You are also responsible for keeping maintenance records as in some instances it may be necessary for you to substantiate hat the required maintenance has been performed.

If you have services performed by someone other than an authorised Holden dealer, you should keep a file of the repair orders to show completion and compliance to these services.

Fuel recommendations

Your new vehicle must use only unleaded fuel: Research Octane No. 91 or higher.

Use of leaded petrol will cause the catalytic convertor to lose its effectiveness and it will also cause the emission control system to function improperly. Further, this can increase maintenance costs.

To prevent leaded petrol from being poured into the fuel tank, your Nova has a small fuel tank opening. The nozzle on pumps with unleaded fuel will fit it, but the larger standard nozzle on pumps with leaded petrol will not.

Sources of vehicle emission

There are three kinds of gases emitted by the vehicle that pollute the atmosphere.

1. Crankcase emission (Blow-by gas)

This is the unburned gas in the cylinder that leaks into the crankcase and is released into the atmosphere, and contains hydrocarbons (HC).

2. Exhaust emission

This is the gas formed by the combustion of the fuel inside the cylinder and discharged into the atmosphere through the exhaust pipe. It contains carbon monoxide (CO), hydrocarbons (HC), and nitrogen oxides (NOx).

3. Fuel evaporative emission

This is the petrol vapor formed by vaporization in the fuel tank and fuel system. It contains hydrocarbons (HC).

Vehicle emission control information label

The vehicle emission control information label is adhered to the underside of your vehicle hood. This label contains the principle engine tune-up specifications relating to the exhaust emissions.

Air Conditioner information

For guidance on how to operate the air conditioner, see “Air conditioner controls" in the section "A" of this Handbook.

In the process of conditioning air, the air conditioner unit removes moisture. The moisture runs onto the surface beneath the vehicle, so do not become alarmed if a pool of water is noticed below a stationary vehicle when the air conditioner is operating.

The air conditioner items requiring service are given on each of the service vouchers in this book.

Like the rest of your vehicle, the air conditioner does require regular maintenance. As an added precaution, the unit should be turned off if a malfunction is noticed (i.e. if it is not working) and the vehicle taken to an authorised Holden dealer at the earliest possible convenience.

To keep the air conditioner as free as possible from odours that may be given off from such things as tobacco smoke, it is best to use the FRESH mode as often as conditions allow. This gives odour giving elements less chance to condense on the evaporator fins of the cooling unit.

To maintain the system in good working order, the air conditioner should be operated at least a minimum of five minutes each week regardless of the season. This will ensure adequate lubrication of system components which helps maximise component life and minimise possible refrigerant loss.

Vehicle Maintenance Schedule

The periodic maintenance service should be followed to ensure correct emission control at all times.

If any of the components or systems are out of adjustment, toxic elements (CO, HC and NOx) in excess of prescribed levels may be emitted into the atmosphere. Two maintenance schedule programmes have been developed which cover all possible conditions you are likely to experience while driving your vehicle. To maintain your vehicle in optimum condition, it is recommended that you follow the maintenance schedule that best represents your driving conditions.

A kilometre or time interval determines when service is necessary.

For most people, the odometer reading will indicate when service is needed. If, however, you drive very little, your vehicle should be serviced at least every 6 months as shown on maintenance schedule A (page 185). Under severe driving conditions, maintenance is required more frequently as shown on maintenance schedule B (page 188).

Maintenance Schedule A

Maintenance schedule A is for normal driving conditions only. This schedule should be followed if your vehicle is operated under any driving conditions other than those specified for maintenance schedule B.

Maintenance Schedule B

Maintenance schedule B is for severe driving conditions only. This schedule should be followed if your vehicle is operated under any of the following severe driving conditions.

- Extensive idling such as taxis, police cars or door to door calls.
- Repeated short trips (less than 8km).
- Driving on rough and/or muddy roads.
- Driving on dusty roads.
- Camper or trailer towing.
- Driving in extremely cold weather and/or on salted roads.
- Repeated short trips in extremely cold weather.

Note:

The maintenance schedules specified in this Handbook outline service requirements for vehicles that are operated under normal or severe driving conditions. If the operating conditions of your vehicle alternate between normal and severe (i.e. infrequent operation under any of the conditions outlined for maintenance schedule B), it is recommended that you consult your Holden dealer who will advise you on the appropriate service requirements for your particular driving conditions.

VEHICLE MAINTENANCE SCHEDULE

SCHEDULE A (for normal driving conditions only.)

Maintenance operations:
- R = Replace
- A = Check and adjust as necessary
- T = Tighten to specified torque
- I = Inspect and correct or replace as necessary
- L = Lubricate

For maintenance service beyond 200,000km or 120 months should continue to be performed at the same intervals shown for each maintenance schedule.

Service interval (Use odometer reading or months, whichever comes first) MAINTENANCE ITEMS	X1000km	1	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
	OR MONTH	—	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
SERVICE ITEMS FOR ALL MODELS AS APPLICABLE																						
BASIC ENGINE COMPONENTS																						
Valve clearance		—	—	—	—	—	—	—	—	A	—	—	—	—	—	—	—	A	—	—	—	—
Drive belts		—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Engine oil (grade SG or better)#[1]		—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Engine oil filter		—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Cooling and heater system hoses and connections		—	—	—	—	I	—	—	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Cooling system coolant (see "Cooling system coolant type selection" page 180)		—	—	—	—	—	—	R	—	—	—	R	—	—	—	R	—	—	—	R	—	—
Exhaust pipes and mountings		—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
AIR CONDITIONING																						
Condenser, clean if necessary		—	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Drain tube		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Idle cut-off and/or idle-up		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Pipes and tubes, including alignment		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Refrigerant level-sight glass		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I

NOTES: #[1] If it is impossible to obtain grade SG or better, grade SF may be used.

continued overleaf

Service interval (Use odometer reading or months, whichever comes first)	For maintenance service beyond 200,000km or 120 months should continue to be performed at the same intervals shown for each maintenance schedule.																				
X1000km	1	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
MAINTENANCE ITEMS OR MONTH	—	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
IGNITION SYSTEM																					
Battery	—	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Spark Plugs (plugs with platinum electrodes)	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—	—	R
FUEL SYSTEM																					
Air filter	—	—	I	—	R	—	I	—	R	—	I	—	R	—	I	—	R	—	I	—	R
Fuel filter	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	R	—	—	—	—
CO/HC concentration (5S-FE engine)	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Fuel tank cap, fuel line, connections and fuel vapour control valve	—	—	—	—	I	—	—	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Charcoal canister	—	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
CHASSIS AND BODY																					
Clutch pedal	I	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Brake pedal and parking brake	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Brake linings and drums (including parking brake linings and drums)	—	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Brake pads and discs	—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Brake fluid	I	I	I	I	R	I	I	I	R	I	I	I	R	I	I	I	R	I	I	I	R
Clutch fluid	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Brake line pipes and hoses	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I

For maintenance service beyond 200,000km or 120 months should continue to be performed at the same intervals shown for each maintenance schedule.

Service interval (Use odometer reading or months, whichever comes first) X1000km	1	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
MAINTENANCE ITEMS OR MONTH	—	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
CHASSIS AND BODY - continued																					
Power steering fluid	—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Steering wheel, linkage and steering gearbox oil	—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Drive shaft boots	—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Ball joints and dust covers	—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Differential gear oil (automatic transmission)	—	—	I	—	R	—	I	—	R	—	I	—	R	—	I	—	R	—	I	—	R
Automatic transmission fluid	—	—	I	—	I	—	R	—	I	—	I	—	R	—	I	—	I	—	R	—	I
Manual transmission oil	—	—	I	—	I	—	I	—	I	—	R	—	I	—	I	—	I	—	I	—	R
Front and rear suspensions	—	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Chassis and body bolts and nuts	T	—	T	—	T	—	T	—	T	—	T	—	T	—	T	—	T	—	T	—	T
Tyres and inflation pressures	—	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
All lights, horns, wipers and washers	—	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
ROAD TEST																					
Road test vehicle	—	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Wheel alignment (side slip) #2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

NOTES: #2 Inspect when abnormal condition is noted.

VEHICLE MAINTENANCE SCHEDULE
SCHEDULE B (for servere driving conditions only.)

Maintenance operations:
R = Replace
A = Check and adjust as necessary
T = Tighten to specified torque
I = Inspect and correct or replace as necessary
L = Lubricate

Service interval (Use odometer reading or months, whichever comes first)	For maintenance service beyond 100,000km or 60 months refer to page 191 to 193																					
	X1000km	1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
MAINTENANCE ITEMS	OR MONTH	—	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
SERVICE ITEMS FOR ALL MODELS AS APPLICABLE																						
BASIC ENGINE COMPONENTS																						
Timing belts		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R
Valve clearance		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	A	—	—	—	—
Drive belts		—	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Engine oil (grade SG or better)#1		—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Engine oil filter		—	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Cooling and heater system hoses and connections		—	—	—	—	—	—	—	—	I	—	—	—	—	—	—	—	I	—	—	—	I
Cooling system coolant (see "Cooling system coolant type selection" page 180)		—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	R
Exhaust pipes and mountings		—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
AIR CONDITIONING																						
Condenser, clean if necessary		—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Drain tube		I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Idle cut-off and/or idle-up		I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Pipes and tubes, including alignment		I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Refrigerant level-sight glass		I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I

NOTES: #[1] If it is impossible to obtain grade SG or better, grade SF may be used.

For maintenance service beyond 100,000km or 60 months refer to pages 191 to 193

Service interval (Use odometer reading or months, whichever comes first) X1000km	1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
MAINTENANCE ITEMS OR MONTH	—	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
IGNITION SYSTEM																					
Battery	—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Spark Plugs (plugs with platinum electrodes)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R
FUEL SYSTEM																					
Air Filter #[2]	—	I	I	I	I	I	I	I	R	I	I	I	I	I	I	I	R	I	I	I	I
Fuel filter	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—
CO/HC concentration (5S-FE engine)	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Fuel tank cap, fuel line, connections and fuel vapour control valve	—	—	—	—	—	—	—	—	I	—	—	—	—	—	—	—	I	—	—	—	I
Charcoal canister	—	—	—	—	—	—	—	—	I	—	—	—	—	—	—	—	I	—	—	—	—
CHASSIS AND BODY																					
Clutch pedal	I	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Brake pedal and parking brake	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Brake linings and drums (including parking brake linings and drums)	—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Brake pads and discs	—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Brake fluid	I	—	I	—	I	—	I	—	R	—	I	—	I	—	I	—	R	—	I	—	I
Clutch fluid	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Brake line pipes and hoses	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I

NOTES: #[2] Inspect every 2500km or every 6 weeks if used mainly in dusty conditions.

continued overleaf

For maintenance service beyond 100,000km or 60 months refer to pages 191 to 193

Service interval (Use odometer reading or months, whichever comes first) / MAINTENANCE ITEMS	X1000km	1	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
	OR MONTH	—	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
Power steering fluid		—	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Steering wheel, linkage and steering gearbox oil		—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Drive shaft boots		—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Ball joints and dust covers		—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Differential gear oil (automatic transmission)		—	—	—	—	I	—	—	—	R	—	—	—	I	—	—	—	R	—	—	—	I
Automatic transmission fluid		—	—	—	—	I	—	—	—	I	—	—	—	R	—	—	—	I	—	—	—	I
Manual transmission oil		—	—	—	—	I	—	—	—	I	—	R	—	I	—	—	—	I	—	—	—	R
Front and rear suspensions		—	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Chassis and body bolts and nuts		T	—	T	—	T	—	T	—	T	—	T	—	T	—	T	—	T	—	T	—	T
Tyres and inflation pressures		—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
All lights, horns, wipers and washers		—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
ROAD TEST																						
Road test vehicle		—	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Wheel alignment (side slip) #3		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

NOTES: #3 Inspect if abnormal condition is noted.

Maintenance service beyond 200,000km or 120 months should continue to be performed at the same intervals shown for each maintenance schedule.

MAINTENANCE ITEMS / Service interval (Use odometer reading or months, whichever comes first) X1000km	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200
OR MONTH	63	66	69	72	75	78	81	84	87	90	93	96	99	102	105	108	111	114	117	120
SERVICE ITEMS FOR ALL MODELS AS APPLICABLE																				
BASIC ENGINE COMPONENTS																				
Timing belts	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R
Valve clearance	—	—	—	—	—	—	—	—	—	—	—	A	—	—	—	—	—	—	—	—
Drive belts	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Engine oil (grade SG or better) #[1]	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Engine oil filter	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Cooling and heater system hoses and connections	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Cooling system coolant (see "Cooling system coolant type selection" page 180)	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	R	—	—	—	—
Exhaust pipes and mountings	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
AIR CONDITIONING																				
Condenser, clean if necessary	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Drain tube	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Idle cut-off and/or idle-up	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Pipes and tubes, including alignment	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Refrigerant level-sight glass	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I

NOTES: #[1] If it is impossible to obtain grade SG or better, grade SF may be used.

continued overleaf

Maintenance service beyond 200,000km or 120 months should continue to be performed at the same intervals shown for each maintenance schedule.

Service interval (Use odometer reading or months, whichever comes first)	X1000km	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200
MAINTENANCE ITEMS	OR MONTH	63	66	69	72	75	78	81	84	87	90	93	96	99	102	105	108	111	114	117	120
IGNITION SYSTEM																					
Battery		—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Spark Plugs (plugs with platinum electrodes)		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	R
FUEL SYSTEM																					
Air Filter #2		I	I	I	R	I	I	I	I	I	I	I	R	I	I	I	I	I	I	I	R
Fuel filter		—	—	—	—	—	—	—	—	—	—	—	R	—	—	—	—	—	—	—	—
CO/HC concentration (5S-FE engine)		—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Fuel tank cap, fuel line, connections and fuel vapour control valve		—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Charcoal canister		—	—	—	I	—	—	—	—	—	—	—	I	—	—	—	—	—	—	—	I
CHASSIS AND BODY																					
Clutch pedal		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Brake pedal and parking brake		—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Brake linings and drums (including parking brake linings and drums)		—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Brake pads and discs		—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Brake fluid		I	I	I	R	I	I	I	I	I	I	I	R	I	I	I	I	I	I	I	R
Clutch fluid		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I

NOTES: #2 Inspect every 2500km or every 6 weeks if mainly used in dusty conditions.

Service interval (Use odometer reading or months, whichever comes first)

Maintenance service beyond 200,000km or 120 months should continue to be performed at the same intervals shown for each maintenance schedule.

MAINTENANCE ITEMS	X1000km	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200
	OR MONTH	63	66	69	72	75	78	81	84	87	90	93	96	99	102	105	108	111	114	117	120
CHASSIS AND BODY - continued																					
Brake line pipes and hoses		—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Power steering fluid		—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Steering wheel, linkage and steering gearbox oil		—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Drive shaft boots		—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Ball joints and dust covers		—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Differential gear oil (automatic transmission)		—	—	—	R	—	—	—	I	—	—	—	R	—	—	—	I	—	—	—	R
Automatic transmission fluid		—	—	—	R	—	—	—	I	—	—	—	I	—	—	—	R	—	—	—	I
Manual transmission oil		—	—	—	I	—	—	—	I	—	R	—	I	—	—	—	I	—	—	—	R
Front and rear suspensions		—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I	—	—	—	I
Chassis and body bolts and nuts		—	T	—	T	—	T	—	T	—	T	—	T	—	T	—	T	—	T	—	T
Tyres and inflation pressures		—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
All lights, horns, wipers and washers		—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
ROAD TEST																					
Road test vehicle		—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I	—	I
Wheel alignment (side slip) #[3]		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

NOTES: #[3] Inspect if abnormal condition is noted.

APPROXIMATE SERVICE TIMES (HOURS)

LIST A (for normal driving conditions only.)

Explanation of abbreviations in brackets:					
M/T	=	With manual transmission	A/T	=	With automatic transmission
D/C	=	Front disc brake and rear drum brake	RR D/C	=	Front and rear disc brakes

SERVICE INTERVAL (Use odometer reading or months, whichever comes first) / **MODEL**	X1000km	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
	OR MONTH	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Apollo (M/T, D/C)		1.0	1.3	1.0	2.3	1.0	1.5	1.0	3.8	1.0	1.9	1.0	2.3	1.0	1.7	1.0	3.8	1.0	1.7	1.0	2.5
Apollo (M/T, RR D/C)		1.0	1.5	1.0	2.5	1.0	1.6	1.0	4.0	1.0	2.1	1.0	2.5	1.0	1.9	1.0	4.0	1.0	1.9	1.0	2.8
Apollo (A/T, D/C)		1.0	1.3	1.0	2.4	1.0	1.8	1.0	3.9	1.0	1.9	1.0	2.7	1.0	1.7	1.0	3.9	1.0	2.1	1.0	2.5
Apollo (A/T, RR D/C) with 5S-FE engine		1.0	1.5	1.0	2.6	1.0	2.0	1.0	4.1	1.0	2.0	1.0	2.9	1.0	1.9	1.0	4.1	1.0	2.2	1.0	2.8
Apollo (A/T, RR D/C) with 3VZ-FE engine		1.0	1.5	1.0	2.6	1.0	2.0	1.0	6.6	1.0	2.1	1.0	2.9	1.0	1.9	1.0	6.6	1.0	2.2	1.0	2.8

APPROXIMATE SERVICE TIMES (HOURS)

LIST B (for severe driving conditions only.)

Explanation of abbreviations in brackets: M/T = With manual transmission A/T = With automatic transmission
D/C = Front disc brake and rear drum brake RR D/C = Front and rear disc brakes

MODEL / **SERVICE INTERVAL** (Use odometer reading or months, whichever comes first)	X1000km	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
	OR MONTH	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
Apollo (M/T, D/C)		0.5	1.5	0.5	1.7	0.5	1.5	0.5	2.3	0.5	1.6	0.5	1.8	0.5	1.5	0.5	3.8	0.5	1.5	0.5	3.6
Apollo (M/T, RR D/C)		0.5	1.7	0.5	1.9	0.5	1.7	0.5	2.5	0.5	1.8	0.5	2.0	0.5	1.7	0.5	4.0	0.5	1.7	0.5	3.8
Apollo (A/T, D/C)		0.5	1.5	0.5	1.7	0.5	1.5	0.5	2.4	0.5	1.5	0.5	2.2	0.5	1.5	0.5	3.9	0.5	1.5	0.5	3.6
Apollo (A/T, RR D/C) with 5S-FE engine		0.5	1.7	0.5	1.9	0.5	1.7	0.5	2.6	0.5	1.7	0.5	2.4	0.5	1.7	0.5	4.1	0.5	1.7	0.5	3.8
Apollo (A/T, RR D/C) with 3VZ-FE engine		0.5	1.7	0.5	1.9	0.5	1.7	0.5	2.6	0.5	1.7	0.5	2.4	0.5	1.7	0.5	6.6	0.5	1.7	0.5	3.8

MODEL / **SERVICE INTERVAL** (Use odometer reading or months, whichever comes first)	X1000km	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200
	OR MONTH	63	66	69	72	75	78	81	84	87	90	93	96	99	102	105	108	111	114	117	120
Apollo (M/T, D/C)		0.5	1.5	0.5	2.3	0.5	1.5	0.5	2.1	0.5	1.6	0.5	3.8	0.5	1.5	0.5	2.1	0.5	1.5	0.5	3.9
Apollo (M/T, RR D/C)		0.5	1.7	0.5	2.5	0.5	1.7	0.5	2.3	0.5	1.8	0.5	4.0	0.5	1.7	0.5	2.3	0.5	1.7	0.5	4.2
Apollo (A/T, D/C)		0.5	1.5	0.5	2.7	0.5	1.5	0.5	2.1	0.5	1.6	0.5	3.9	0.5	1.5	0.5	2.4	0.5	1.5	0.5	3.9
Apollo (A/T, RR D/C) with 5S-FE engine		0.5	1.7	0.5	2.9	0.5	1.7	0.5	2.3	0.5	1.7	0.5	4.1	0.5	1.7	0.5	2.6	0.5	1.7	0.5	4.2
Apollo (A/T, RR D/C) with 3VZ-FE engine		0.5	1.7	0.5	2.9	0.5	1.7	0.5	2.3	0.5	1.7	0.5	6.6	0.5	1.7	0.5	2.6	0.5	1.7	0.5	4.2

INTERMEDIATE SERVICE RECORD FOR VEHICLES OPERATED UNDER SEVERE DRIVING CONDITIONS

For vehicles operated under severe driving conditions, engine oil and filter change, and other items as listed in maintenance shedule B must be serviced every 5000 km or every 3 months (approximate service time 0.5 hours).

5000 km or 3 months Date ____________ km ____________	To be stamped by an authorised Holden Dealer	HOLDEN WISE QUALITY SERVICE & PARTS Note: Oil and materials required to complete the intermediate services are chargeable to the owner.		45000 km or 27 months Date ____________ ____________ km ____________	To be stamped by an authorised Holden Dealer
15000 km or 9 months Date ____________ km ____________	To be stamped by an authorised Holden Dealer			55000 km or 33 months Date ____________ km ____________	To be stamped by an authorised Holden Dealer
25000 km or 15 months Date ____________ km ____________	To be stamped by an authorised Holden Dealer	35000 km or 21 months Date ____________ km ____________	To be stamped by an authorised Holden Dealer	65000 km or 39 months Date ____________ km ____________	To be stamped by an authorised Holden Dealer

75000 km or 45 months Date ____________ km ____________	To be stamped by an authorised Holden Dealer	HOLDEN WISE QUALITY SERVICE & PARTS		**115000 km or 69 months** Date ____________ km ____________	To be stamped by an authorised Holden Dealer
85000 km or 51 months Date ____________ km ____________	To be stamped by an authorised Holden Dealer	**Note:** Oil and materials required to complete the intermediate services are chargeable to the owner.		**125000 km or 75 months** Date ____________ km ____________	To be stamped by an authorised Holden Dealer
95000 km or 57 months Date ____________ km ____________	To be stamped by an authorised Holden Dealer	**105000 km or 63 months** Date ____________ km ____________	To be stamped by an authorised Holden Dealer	**135000 km or 81 months** Date ____________ km ____________	To be stamped by an authorised Holden Dealer

continued overleaf

145000 km or 87 months Date __________ km __________	To be stamped by an authorised Holden Dealer	**HOLDEN WISE** QUALITY SERVICE & PARTS		**185000 km or 111 months** Date __________ km __________	To be stamped by an authorised Holden Dealer
155000 km or 93 months Date __________ km __________	To be stamped by an authorised Holden Dealer	Note: Oil and materials required to complete the intermediate services are chargeable to the owner.		**195000 km or 117 months** Date __________ km __________	To be stamped by an authorised Holden Dealer
165000 km or 99 months Date __________ km __________	To be stamped by an authorised Holden Dealer	**175000 km or 105 months** Date __________ km __________	To be stamped by an authorised Holden Dealer	**205000 km or 123 months** Date __________ km __________	To be stamped by an authorised Holden Dealer

1000 km

Free Service
Voucher*

Date ....

km ....

Dealer Stamp

To be stamped by

an authorised

Holden Dealer

Free 1000 km Service Voucher.*

Presentation of this Handbook and voucher to an authorised Holden Dealer entitles the owner to the following free service.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

AIR CONDITIONING

☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level - sight glass.

FUEL SYSTEM

☐ Inspect CO/HC concentration (5S-FE engine).

CHASSIS AND BODY

☐ Tighten chassis body bolts and nuts.
☐ Inspect brake fluid.
☐ Inspect brake line pipes and hoses.
☐ Inspect brake pedal and parking brake.
☐ Inspect clutch fluid.
☐ Inspect clutch pedal.

* Oils and materials used will be charged to the owner at the normal rate.

Model ....VIN No. ....Engine No. ....

Owner's Name and Address ....

....

Name of selling Dealer ....

Name of Servicing Dealer ....Service Date ....

Servicing Dealer's Signature ....

I hereby acknowledge receipt of the 1000 km free service

Owner's Signature ....

10000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by

an authorised

Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

10000 km or 6 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

- ☐ Replace engine oil (grade SF, SG or better).
- ☐ Replace engine oil filter.

AIR CONDITIONING

- ☐ Inspect condenser, clean if necessary.
- ☐ Inspect drain tube.
- ☐ Inspect idle cut off and/or idle up.
- ☐ Inspect pipes and tubes, including alignment.
- ☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

- ☐ Inspect battery.

CHASSIS AND BODY

- ☐ Inspect all lights, horns, wipers and washers.
- ☐ Inspect brake fluid.
- ☐ Inspect clutch fluid.
- ☐ Inspect tyres and inflation pressures.

ROAD TEST

- ☐ Road test vehicle.
- ☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

BASIC ENGINE COMPONENTS

- ☐ *Inspect exhaust pipes and mountings.*

FUEL SYSTEM

- ☐ *Inspect air filter.*

CHASSIS AND BODY

- ☐ *Tighten chassis body bolts and nuts.*
- ☐ *Inspect ball joints and dust covers.*
- ☐ *Inspect brake line pipes and hoses.*
- ☐ *Inspect brake linings and drums (including parking brake linings and drums).*
- ☐ *Inspect brake pads and discs.*
- ☐ *Inspect drive shaft boots.*
- ☐ *Inspect steering wheel, linkage and steering gearbox oil.*

Note: Oils and materials required to complete the 10000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner ....Date ....

20000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

Date ....

km ....

Dealer Stamp

To be stamped by

an authorised

Holden Dealer

20000 km or 12 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

- ☐ Replace engine oil (grade SF, SG or better).
- ☐ Replace engine oil filter.
- ☐ Inspect drive belts.
- ☐ Inspect exhaust pipes and mountings.

AIR CONDITIONING

- ☐ Inspect condenser, clean if necessary.
- ☐ Inspect drain tube.
- ☐ Inspect idle cut off and/or idle up.
- ☐ Inspect pipes and tubes, including alignment.
- ☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

- ☐ Inspect battery.

FUEL SYSTEM

- ☐ Inspect CO/HC concentration (5S-FE engine).
- ☐ Inspect air filter.

CHASSIS AND BODY

- ☐ Tighten chassis body bolts and nuts.
- ☐ Inspect all lights, horns, wipers and washers.
- ☐ Inspect automatic transmission fluid.
- ☐ Inspect ball joints and dust covers.
- ☐ Inspect brake fluid.
- ☐ Inspect brake line pipes and hoses.
- ☐ Inspect brake pads and discs.
- ☐ Inspect brake pedal and parking brake.
- ☐ Inspect clutch fluid.
- ☐ Inspect differential gear oil (automatic transmission).
- ☐ Inspect drive shaft boots.
- ☐ Inspect manual transmission oil.
- ☐ Inspect power steering fluid.
- ☐ Inspect steering wheel, linkage and steering gearbox oil.
- ☐ Inspect tyres and inflation pressures.

ROAD TEST

- ☐ Road test vehicle.
- ☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

20000 km Service continued overleaf.

Note: Oils and materials required to complete the 20000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

20000 km or 12 Months Service Voucher.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

CHASSIS AND BODY

☐ *Inspect brake linings and drums (including parking brake linings and drums).*

☐ *Inspect front and rear suspensions.*

30000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

30000 km or 18 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

CHASSIS AND BODY

☐ Inspect all lights, horns, wipers and washers.
☐ Inspect brake fluid.
☐ Inspect clutch fluid.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following items should also be serviced.

BASIC ENGINE COMPONENTS

☐ *Inspect exhaust pipes and mountings.*

FUEL SYSTEM

☐ *Inspect air filter.*

CHASSIS AND BODY

☐ *Tighten chassis body bolts and nuts.*
☐ *Inspect ball joints and dust covers.*
☐ *Inspect brake line pipes and hoses.*
☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect brake pads and discs.*
☐ *Inspect drive shaft boots.*
☐ *Inspect steering wheel, linkage and steering gearbox oil.*

Note: Oils and materials required to complete the 30000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

40000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDENWISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by

an authorised

Holden Dealer

HOLDENWISE
QUALITY SERVICE & PARTS

40000 km or 24 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.
☐ Inspect cooling and heater system hoses and connections.
☐ Inspect drive belts.
☐ Inspect exhaust pipes and mountings.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

FUEL SYSTEM

☐ Replace air filter.
☐ Inspect CO/HC concentration (5S-FE engine).
☐ Inspect charcoal canister
☐ Inspect fuel tank cap, fuel line, connections and fuel vapour control valve.

CHASSIS AND BODY

☐ Replace brake fluid.
☐ Replace differential gear oil (automatic transmission).
☐ Tighten chassis body bolts and nuts.
☐ Inspect all lights, horns, wipers and washers.
☐ Inspect automatic transmission fluid.
☐ Inspect ball joints and dust covers.
☐ Inspect brake line pipes and hoses.
☐ Inspect brake linings and drums (including parking brake linings and drums).
☐ Inspect brake pads and discs.
☐ Inspect brake pedal and parking brake.
☐ Inspect clutch fluid.

40000 km Service continued overleaf.

Note: Oils and materials required to complete the 40000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

40000 km or 24 Months Service Voucher.

CHASSIS AND BODY — continued

☐ Inspect drive shaft boots.
☐ Inspect front and rear suspensions.
☐ Inspect manual transmission oil.
☐ Inspect power steering fluid.
☐ Inspect steering wheel, linkage and steering gearbox oil.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

50000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

50000 km or 30 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

CHASSIS AND BODY

☐ Inspect all lights, horns, wipers and washers.
☐ Inspect brake fluid.
☐ Inspect clutch fluid.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

BASIC ENGINE COMPONENTS

☐ *Inspect exhaust pipes and mountings.*

FUEL SYSTEM

☐ *Inspect air filter.*

CHASSIS AND BODY

☐ *Replace manual transmission oil.*
☐ *Tighten chassis body bolts and nuts.*
☐ *Inspect ball joints and dust covers.*
☐ *Inspect brake line pipes and hoses.*
☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect brake pads and discs.*
☐ *Inspect drive shaft boots.*
☐ *Inspect steering wheel, linkage and steering gearbox oil.*

Note: Oils and materials required to complete the 50000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

60000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

60000 km or 36 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

- ☐ Replace cooling system coolant (See "Cooling system coolant type selection" page 180).
- ☐ Replace engine oil (grade SF, SG or better).
- ☐ Replace engine oil filter.
- ☐ Inspect drive belts.
- ☐ Inspect exhaust pipes and mountings.

AIR CONDITIONING

- ☐ Inspect condenser, clean if necessary.
- ☐ Inspect drain tube.
- ☐ Inspect idle cut off and/or idle up.
- ☐ Inspect pipes and tubes, including alignment.
- ☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

- ☐ Inspect battery.

FUEL SYSTEM

- ☐ Inspect CO/HC concentration (5S-FE engine).
- ☐ Inspect air filter.

CHASSIS AND BODY

- ☐ Replace automatic transmission fluid.
- ☐ Tighten chassis body bolts and nuts.
- ☐ Inspect all lights, horns, wipers and washers.
- ☐ Inspect ball joints and dust covers.
- ☐ Inspect brake fluid.
- ☐ Inspect brake line pipes and hoses.
- ☐ Inspect brake pads and discs.
- ☐ Inspect brake pedal and parking brake.
- ☐ Inspect clutch fluid.
- ☐ Inspect differential gear oil (automatic transmission).
- ☐ Inspect drive shaft boots.
- ☐ Inspect manual transmission oil.
- ☐ Inspect power steering fluid.
- ☐ Inspect steering wheel, linkage and steering gearbox oil.
- ☐ Inspect tyres and inflation pressures.

ROAD TEST

- ☐ Road test vehicle.
- ☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

60000 km Service continued overleaf.

Note: Oils and materials required to complete the 60000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

60000 km or 36 Months Service Voucher.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

CHASSIS AND BODY

☐ *Inspect brake linings and drums (including parking brake linings and drums).*

☐ *Inspect front and rear suspensions.*

70000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

70000 km or 42 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

CHASSIS AND BODY

☐ Inspect all lights, horns, wipers and washers.
☐ Inspect brake fluid.
☐ Inspect clutch fluid.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

BASIC ENGINE COMPONENTS

☐ *Inspect exhaust pipes and mountings.*

FUEL SYSTEM

☐ *Inspect air filter.*

CHASSIS AND BODY

☐ *Tighten chassis body bolts and nuts.*
☐ *Inspect ball joints and dust covers.*
☐ *Inspect brake line pipes and hoses.*
☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect brake pads and discs.*
☐ *Inspect drive shaft boots.*
☐ *Inspect steering wheel, linkage and steering gearbox oil.*

Note: Oils and materials required to complete the 70000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

80000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

80000 km or 48 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.
☐ Adjust valve clearance.
☐ Inspect cooling and heater system hoses and connections.
☐ Inspect drive belts.
☐ Inspect exhaust pipes and mountings.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

FUEL SYSTEM

☐ Replace air filter.
☐ Replace fuel filter.
☐ Inspect CO/HC concentration (5S-FE engine).
☐ Inspect charcoal canister .
☐ Inspect fuel tank cap, fuel line, connections and fuel vapour control valve.

CHASSIS AND BODY

☐ Replace brake fluid.
☐ Replace differential gear oil (automatic transmission).
☐ Tighten chassis body bolts and nuts.
☐ Inspect all lights, horns, wipers and washers.
☐ Inspect automatic transmission fluid.
☐ Inspect ball joints and dust covers.
☐ Inspect brake line pipes and hoses.
☐ Inspect brake linings and drums (including parking brake linings and drums).
☐ Inspect brake pads and discs.
☐ Inspect brake pedal and parking brake.
☐ Inspect clutch fluid.

80000 km Service continued overleaf.

Note: Oils and materials required to complete the 80000 km service are chargeable to the Owner.

Additional services requested ....
....

Signature of/for Owner .... Date ....

HOLDEN WISE
QUALITY SERVICE & PARTS

80000 km or 48 Months Service Voucher.

CHASSIS AND BODY (continued)

☐ Inspect drive shaft boots.
☐ Inspect front and rear suspensions.
☐ Inspect manual transmission oil.
☐ Inspect power steering fluid.
☐ Inspect steering wheel, linkage and steering gearbox oil.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

90000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDENWISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDENWISE
QUALITY SERVICE & PARTS

90000 km or 54 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

CHASSIS AND BODY

☐ Inspect all lights, horns, wipers and washers.
☐ Inspect brake fluid.
☐ Inspect clutch fluid.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions, the following should also be serviced.

BASIC ENGINE COMPONENTS

☐ *Inspect exhaust pipes and mountings.*

FUEL SYSTEM

☐ Inspect air filter.

CHASSIS AND BODY

☐ *Tighten chassis and body bolts and nuts.*
☐ *Inspect ball joints and dust covers.*
☐ *Inspect brake line pipes and hoses.*
☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect brake pads and discs.*
☐ *Inspect drive shaft boots.*
☐ *Inspect steering wheel, linkage and steering gearbox oil.*

Note: Oils and materials required to complete the 90000 km service are chargeable to the Owner.

Additional services requested ....
....

Signature of/for Owner .... Date ....

100000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by

an authorised

Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

100000 km or 60 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

- ☐ Replace cooling system coolant (See “Cooling system coolant type selection” page 180).
- ☐ Replace engine oil (grade SF, SG or better).
- ☐ Replace engine oil filter.
- ☐ Inspect cooling and heater system hoses and connections.
- ☐ Inspect drive belts.
- ☐ Inspect exhaust pipes and mountings.

AIR CONDITIONING

- ☐ Inspect condenser, clean if necessary.
- ☐ Inspect drain tube.
- ☐ Inspect idle cut off and/or idle up.
- ☐ Inspect pipes and tubes, including alignment.
- ☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

- ☐ Replace spark plugs.
- ☐ Inspect battery.

FUEL SYSTEM

- ☐ Inspect CO/HC concentration (5S-FE engine).
- ☐ Inspect air filter.
- ☐ Inspect fuel tank cap, fuel line, connections and fuel vapour control valve.

CHASSIS AND BODY

- ☐ Replace manual transmission oil.
- ☐ Tighten chassis body bolts and nuts.
- ☐ Inspect all lights, horns, wipers and washers.
- ☐ Inspect automatic transmission fluid.
- ☐ Inspect ball joints and dust covers.
- ☐ Inspect brake fluid.
- ☐ Inspect brake line pipes and hoses.
- ☐ Inspect brake pads and discs.
- ☐ Inspect brake pedal and parking brake.
- ☐ Inspect clutch fluid.
- ☐ Inspect differential gear oil (automatic transmission).
- ☐ Inspect drive shaft boots.
- ☐ Inspect power steering fluid.
- ☐ Inspect steering wheel, linkage and steering gearbox oil.
- ☐ Inspect tyres and inflation pressures.

100000 km Service continued overleaf.

Note: Oils and materials required to complete the 100000 km service are chargeable to the Owner.

Additional services requested ....

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Signature of/for Owner .... Date ....

100000 km or 60 Months Service Voucher.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

BASIC ENGINE COMPONENTS

☐ *Replace timing belt.*

CHASSIS AND BODY

☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect front and rear suspensions.*

110000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by

an authorised

Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

110000 km or 66 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

CHASSIS AND BODY

☐ Inspect all lights, horns, wipers and washers.
☐ Inspect brake fluid.
☐ Inspect clutch fluid.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

BASIC ENGINE COMPONENTS

☐ *Inspect exhaust pipes and mountings.*

FUEL SYSTEM

☐ *Inspect air filter.*

CHASSIS AND BODY

☐ *Tighten chassis body bolts and nuts.*
☐ *Inspect ball joints and dust covers.*
☐ *Inspect brake line pipes and hoses.*
☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect brake pads and discs.*
☐ *Inspect drive shaft boots.*
☐ *Inspect steering wheel, linkage and steering gearbox oil.*

Note: Oils and materials required to complete the 110000 km service are chargeable to the Owner.

Additional services requested ....

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Signature of/for Owner .... Date ....

120000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

120000 km or 72 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.
☐ Inspect cooling and heater system hoses and connections.
☐ Inspect drive belts.
☐ Inspect exhaust pipes and mountings.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

FUEL SYSTEM

☐ Replace air filter.
☐ Inspect CO/HC concentration (5S-FE engine).
☐ Inspect charcoal canister.
☐ Inspect fuel tank cap, fuel line, connections and fuel vapour control valve.

CHASSIS AND BODY

☐ Replace automatic transmission fluid.
☐ Replace brake fluid.
☐ Replace differential gear oil (automatic transmission).
☐ Tighten chassis body bolts and nuts.
☐ Inspect all lights, horns, wipers and washers.
☐ Inspect ball joints and dust covers.
☐ Inspect brake line pipes and hoses.
☐ Inspect brake linings and drums (including parking brake linings and drums).
☐ Inspect brake pads and discs.
☐ Inspect brake pedal and parking brake.
☐ Inspect clutch fluid.
☐ Inspect drive shaft boots.
☐ Inspect front and rear suspensions.
☐ Inspect manual transmission oil.
☐ Inspect power steering fluid.
☐ Inspect steering wheel, linkage and steering gearbox oil.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

Note: Oils and materials required to complete the 120000 km service are chargeable to the Owner.

Additional services requested ....

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Signature of/for Owner .... Date ....

130000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by

an authorised

Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

130000 km or 78 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

CHASSIS AND BODY

☐ Inspect all lights, horns, wipers and washers.
☐ Inspect brake fluid.
☐ Inspect clutch fluid.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

BASIC ENGINE COMPONENTS

☐ *Inspect exhaust pipes and mountings.*

FUEL SYSTEM

☐ *Inspect air filter.*

CHASSIS AND BODY

☐ *Tighten chassis body bolts and nuts.*
☐ *Inspect ball joints and dust covers.*
☐ *Inspect brake line pipes and hoses.*
☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect brake pads and discs.*
☐ *Inspect drive shaft boots.*
☐ *Inspect steering wheel, linkage and steering gearbox oil.*

Note: Oils and materials required to complete the 130000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

140000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

140000 km or 84 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace cooling system coolant (See "Cooling system coolant type selection" page 180).
☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.
☐ Inspect cooling and heater system hoses and connections.
☐ Inspect drive belts.
☐ Inspect exhaust pipes and mountings.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

FUEL SYSTEM

☐ Inspect CO/HC concentration (5S-FE engine).
☐ Inspect air filter.
☐ Inspect fuel tank cap, fuel line, connections and fuel vapour control valve.

CHASSIS AND BODY

☐ Tighten chassis body bolts and nuts.
☐ Inspect all lights, horns, wipers and washers.
☐ Inspect automatic transmission fluid.
☐ Inspect ball joints and dust covers.
☐ Inspect brake fluid.
☐ Inspect brake line pipes and hoses.
☐ Inspect brake pads and discs.
☐ Inspect brake pedal and parking brake.
☐ Inspect clutch fluid.
☐ Inspect differential gear oil (automatic transmission).
☐ Inspect drive shaft boots.
☐ Inspect manual transmission oil.
☐ Inspect power steering fluid.
☐ Inspect steering wheel, linkage and steering gearbox oil.
☐ Inspect tyres and inflation pressures.

140000 km Service continued overleaf.

Note: Oils and materials required to complete the 140000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

HOLDEN WISE
QUALITY SERVICE & PARTS

140000 km or 84 Months Service Voucher.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

CHASSIS AND BODY

☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect front and rear suspensions.*

150000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

150000 km or 90 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

CHASSIS AND BODY

☐ Inspect all lights, horns, wipers and washers.
☐ Inspect brake fluid.
☐ Inspect clutch fluid.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

BASIC ENGINE COMPONENTS

☐ *Inspect exhaust pipes and mountings.*

FUEL SYSTEM

☐ *Inspect air filter.*

CHASSIS AND BODY

☐ *Replace manual transmission oil.*
☐ *Tighten chassis body bolts and nuts.*
☐ *Inspect ball joints and dust covers.*
☐ *Inspect brake line pipes and hoses.*
☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect brake pads and discs.*
☐ *Inspect drive shaft boots.*
☐ *Inspect steering wheel, linkage and steering gearbox oil.*

Note: Oils and materials required to complete the 150000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

160000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

160000 km or 96 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.
☐ Adjust valve clearance.
☐ Inspect cooling and heater system hoses and connections.
☐ Inspect drive belts.
☐ Inspect exhaust pipes and mountings.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

FUEL SYSTEM

☐ Replace air filter.
☐ Replace fuel filter.
☐ Inspect CO/HC concentration (5S-FE engine).
☐ Inspect charcoal canister.
☐ Inspect fuel tank cap, fuel line, connections and fuel vapour control valve.

CHASSIS AND BODY

☐ Replace brake fluid.
☐ Replace differential gear oil (automatic transmission).
☐ Tighten chassis body bolts and nuts.
☐ Inspect all lights, horns, wipers and washers.
☐ Inspect automatic transmission fluid.
☐ Inspect ball joints and dust covers.
☐ Inspect brake line pipes and hoses.
☐ Inspect brake linings and drums (including parking brake linings and drums).
☐ Inspect brake pads and discs.
☐ Inspect brake pedal and parking brake.
☐ Inspect clutch fluid.
☐ Inspect drive shaft boots.
☐ Inspect front and rear suspensions.

160000 km Service continued overleaf.

Note: Oils and materials required to complete the 160000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

160000 km or 96 Months Service Voucher.

CHASSIS AND BODY -- continued

☐ Inspect manual transmission oil.
☐ Inspect power steering fluid.
☐ Inspect steering wheel, linkage and steering gearbox oil.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

170000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by

an authorised

Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

170000 km or 102 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

- ☐ Replace engine oil (grade SF, SG or better).
- ☐ Replace engine oil filter.

AIR CONDITIONING

- ☐ Inspect condenser, clean if necessary.
- ☐ Inspect drain tube.
- ☐ Inspect idle cut off and/or idle up.
- ☐ Inspect pipes and tubes, including alignment.
- ☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

- ☐ Inspect battery.

CHASSIS AND BODY

- ☐ Inspect all lights, horns, wipers and washers.
- ☐ Inspect brake fluid.
- ☐ Inspect clutch fluid.
- ☐ Inspect tyres and inflation pressures.

ROAD TEST

- ☐ Road test vehicle.
- ☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

BASIC ENGINE COMPONENTS

- ☐ *Inspect exhaust pipes and mountings.*

FUEL SYSTEM

- ☐ *Inspect air filter.*

CHASSIS AND BODY

- ☐ *Tighten chassis body bolts and nuts.*
- ☐ *Inspect ball joints and dust covers.*
- ☐ *Inspect brake line pipes and hoses.*
- ☐ *Inspect brake linings and drums (including parking brake linings and drums).*
- ☐ *Inspect brake pads and discs.*
- ☐ *Inspect drive shaft boots.*
- ☐ *Inspect steering wheel, linkage and steering gearbox oil.*

Note: Oils and materials required to complete the 170000 km service are chargeable to the Owner.

Additional services requested ....

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Signature of/for Owner .... Date ....

180000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

180000 km or 108 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

- ☐ Replace cooling system coolant (See "Cooling system coolant type selection" page 180).
- ☐ Replace engine oil (grade SF, SG or better).
- ☐ Replace engine oil filter.
- ☐ Inspect cooling and heater system hoses and connections.
- ☐ Inspect drive belts.
- ☐ Inspect exhaust pipes and mountings.

AIR CONDITIONING

- ☐ Inspect condenser, clean if necessary.
- ☐ Inspect drain tube.
- ☐ Inspect idle cut off and/or idle up.
- ☐ Inspect pipes and tubes, including alignment.
- ☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

- ☐ Inspect battery.

FUEL SYSTEM

- ☐ Inspect CO/HC concentration (5S-FE engine).
- ☐ Inspect air filter.
- ☐ Inspect fuel tank cap, fuel line, connections and fuel vapour control valve.

CHASSIS AND BODY

- ☐ Replace automatic transmission fluid.
- ☐ Tighten chassis body bolts and nuts.
- ☐ Inspect all lights, horns, wipers and washers.
- ☐ Inspect ball joints and dust covers.
- ☐ Inspect brake fluid.
- ☐ Inspect brake line pipes and hoses.
- ☐ Inspect brake pads and discs.
- ☐ Inspect brake pedal and parking brake.
- ☐ Inspect clutch fluid.
- ☐ Inspect differential gear oil (automatic transmission).
- ☐ Inspect drive shaft boots.
- ☐ Inspect manual transmission oil.
- ☐ Inspect power steering fluid.
- ☐ Inspect steering wheel, linkage and steering gearbox oil.
- ☐ Inspect tyres and inflation pressures.

180000 km Service continued overleaf.

Note: Oils and materials required to complete the 10000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... **Date** ....

HOLDEN WISE
QUALITY SERVICE & PARTS

180000 km or 108 Months Service Voucher.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

CHASSIS AND BODY

☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect front and rear suspensions.*

190000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

HOLDEN WISE
QUALITY SERVICE & PARTS

Date ....

km ....

Dealer Stamp

To be stamped by
an authorised
Holden Dealer

HOLDEN WISE
QUALITY SERVICE & PARTS

190000 km or 114 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Inspect battery.

CHASSIS AND BODY

☐ Inspect all lights, horns, wipers and washers.
☐ Inspect brake fluid.
☐ Inspect clutch fluid.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

BASIC ENGINE COMPONENTS

☐ *Inspect exhaust pipes and mountings.*

FUEL SYSTEM

☐ *Inspect air filter.*

CHASSIS AND BODY

☐ *Tighten chassis body bolts and nuts.*
☐ *Inspect ball joints and dust covers.*
☐ *Inspect brake line pipes and hoses.*
☐ *Inspect brake linings and drums (including parking brake linings and drums).*
☐ *Inspect brake pads and discs.*
☐ *Inspect drive shaft boots.*
☐ *Inspect steering wheel, linkage and steering gearbox oil.*

Note: Oils and materials required to complete the 190000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

180000 km or 144 Months Service Voucher.

[illegible]

Signature of the Owner Date

200000 km

Times quoted in Approximate Service Times List A (page 194) are for all service items (excepting items listed for Air Conditioner, Wheel Alignment, and Severe Driving Conditions) as required. Times quoted in List B (page 195) also allow for additional service items for Severe Driving Conditions, but do not allow for additional service items as may be recommended by your Holden Dealer. If vehicle is equiped with a "Holden Air" conditioner, add 0.3 of an hour to vehicle service time.

Date ....

km ....

Dealer Stamp

To be stamped by

an authorised

Holden Dealer

200000 km or 120 Months Service Voucher.

SERVICE ITEMS FOR ALL MODELS AS APPLICABLE

BASIC ENGINE COMPONENTS

☐ Replace engine oil (grade SF, SG or better).
☐ Replace engine oil filter.
☐ Inspect cooling and heater system hoses and connections.
☐ Inspect drive belts.
☐ Inspect exhaust pipes and mountings.

AIR CONDITIONING

☐ Inspect condenser, clean if necessary.
☐ Inspect drain tube.
☐ Inspect idle cut off and/or idle up.
☐ Inspect pipes and tubes, including alignment.
☐ Inspect refrigerant level-sight glass.

IGNITION SYSTEM

☐ Replace spark plugs.
☐ Inspect battery.

FUEL SYSTEM

☐ Replace air filter.
☐ Inspect CO/HC concentration (5S-FE engine).
☐ Inspect charcoal canister.
☐ Inspect fuel tank cap, fuel line, connections and fuel vapour control valve.

CHASSIS AND BODY

☐ Replace brake fluid.
☐ Replace differential gear oil (automatic transmission).
☐ Replace manual transmission oil.
☐ Tighten chassis body bolts and nuts.
☐ Inspect all lights, horns, wipers and washers.
☐ Inspect automatic transmission fluid.
☐ Inspect ball joints and dust covers.
☐ Inspect brake line pipes and hoses.
☐ Inspect brake linings and drums (including parking brake linings and drums).
☐ Inspect brake pads and discs.
☐ Inspect brake pedal and parking brake.
☐ Inspect clutch fluid.
☐ Inspect drive shaft boots.
☐ Inspect front and rear suspensions.

200000 km Service continued overleaf.

Note: Oils and materials required to complete the 200000 km service are chargeable to the Owner.

Additional services requested ....

....

Signature of/for Owner .... Date ....

200000 km or 120 Months Service Voucher.

CHASSIS AND BODY -– continued

☐ Inspect power steering fluid.
☐ Inspect steering wheel, linkage and steering gearbox oil.
☐ Inspect tyres and inflation pressures.

ROAD TEST

☐ Road test vehicle.
☐ Inspect wheel alignment (side slip) when abnormal condition is noted.

If vehicle is subjected to severe or abnormal driving conditions the following should also be serviced.

BASIC ENGINE COMPONENTS

☐ *Replace timing belt.*

Notice of Name/Address Ownership Change

PLEASE TICK APPROPRIATE SQUARE

☐ NAME/ADDRESS CHANGE

☐ SUBSEQUENT OWNER

Owner's. Name Mr. / Mrs. / Miss ....

Address ....

Town ....

State ....

Registration No. ....

Vehicle Identification Number (VIN) ....

To ensure continued interest in your, Holden's requests that owners who change their name or address (or subsequent owners who purchase the vehicle) fill in and mail one of the attached notices. Please forward to the address shown on the reverse side of the notice.

Notice of Name/Address Ownership Change

PLEASE TICK APPROPRIATE SQUARE

☐ NAME/ADDRESS CHANGE

☐ SUBSEQUENT OWNER

Owner's. Name Mr. / Mrs. / Miss ....

Address ....

Town ....

State ....

Registration No. ....

Vehicle Identification Number (VIN) ....

To ensure continued interest in your, Holden's requests that owners who change their name or address (or subsequent owners who purchase the vehicle) fill in and mail one of the attached notices. Please forward to the address shown on the reverse side of the notice.

Place in an envelope and mail to:

The Manager - Warranty Administration
Service Department
General Motors-Holden's Automotive Limited
Box 548D, G.P.O.
Melbourne,
Victoria, 3001

Place in an envelope and mail to:

The Manager - Warranty Administration
Service Department
General Motors-Holden's Automotive Limited
Box 548D, G.P.O.
Melbourne,
Victoria, 3001

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